

COUNTY BOROUGH OF PRESTON.



REPORT
OF THE
Medical Officer of Health
on the Health of the Borough
for the year
1931.

PRESTON :
R. SEED & SONS, Printers, 43 Guildhall Street
1932.

ANNUAL REPORT, 1931.

TABLE OF CONTENTS.

	PAGE
INTRODUCTION	8
I. STATISTICAL CIRCUMSTANCES OF THE DISTRICT	12
II. SANITARY CIRCUMSTANCES OF THE DISTRICT	30
III. PORT SANITARY ADMINISTRATION	42
IV. FOOD	48
V. PREVALENCE OF, AND CONTROL OVER, INFECTIOUS DISEASES	59
VI. MATERNITY AND CHILD WELFARE	81
SCHOOL MEDICAL SERVICE	93

HEALTH COMMITTEE, 1931-32.



The Right Worshipful the Mayor (Mr. Councillor T. C. RAINFORD).

Chairman : Mr. Alderman RICHARD DURHAM.

Vice-Chairman : Mr. Alderman T. H. C. DERHAM, M.B., C.M.

Mrs. Alderman A. M. PIMBLETT, J.P.

Mr. Alderman J. HERBERT.

Mr. Councillor F. W. COLLINSON, F.R.C.S.

Mr. Councillor R. C. HANDLEY, J.P.

Mr. Councillor F. J. HEATON.

Mr. Councillor R. C. PYE.

Mr. Councillor R. MILLER.

Mr. Councillor J. HOPKINSON.

Mr. Councillor R. N. HULL.

Mr. Councillor W. BECKETT.

Mr. Councillor J. SWARBRICK.

Mr. Councillor W. POMFRET.

Mr. Councillor F. COLLINSON.

Mr. Councillor H. HOWARTH.

MATERNITY AND CHILD WELFARE COMMITTEE.

Chairman : Mrs. Alderman A. M. PIMBLETT, J.P.

The Health Committee, with the following ladies adopted as Members :—

Mrs. DUNBAR, J.P.

Mrs. MARSDEN, J.P.

Mrs. TODD, J.P.

Mrs. LUCAS.

Mrs. WHITE.

Mrs. LEES.

Mrs. BARWICK.

HOSPITALS SUB-COMMITTEE.

Chairman : Mr. Alderman R. DURHAM.

Vice-Chairman : Mr. Alderman T. H. C. DERHAM.

Mrs. Alderman A. M. PIMBLETT.

Mr. Alderman J. HERBERT.

Mr. Councillor W. BECKETT.

Mr. Councillor F. J. HEATON.

Mr. Councillor R. C. HANDLEY.

Mr. Councillor F. W. COLLINSON.

Mr. Councillor H. HOWARTH.

THE MEDICAL SERVICE SUB-COMMITTEE OF THE EDUCATION COMMITTEE :

November, 1931.

Chairman : Mr. Alderman R. DURHAM.

Vice-Chairman : Mrs. Alderman A. M. PIMBLETT.

Mr. Councillor R. C. PYE.

Mr. Councillor J. SWARBRICK.

Mr. Councillor T. BLACKBURN.

Mr. Councillor H. HOWARTH.

The Rev. Canon MORRIS.

Mr. J. YATES.

Mr. W. J. HEAL.

Miss C. E. McCOURTY.

Mrs. MEGAHY.

The Annual Report of the Medical Officer of Health.

INTRODUCTION.

The work of the Public Health Department and the School Medical Service is discussed in the following pages.

The reports in the various Sections, with their accompanying tables, have been materially shortened on the ground of expense, many tables and diagrams being omitted.

Vital statistics of recent years show a continual fall in the Birth Rate combined with a stationary Death Rate.

Infantile mortality is steadily decreasing, but at a slower rate than the Birth Rate, so that a practically stationary Death Rate indicates a higher rate of death among those in the later age groups. The falling Birth Rate and the stationary Death Rate have the effect of increasing the average age of the surviving population. Furthermore, the increased number of persons in the later age groups with a stationary population, will result in a larger proportion of deaths from diseases occurring in middle and advanced life, such as cancer, diseases of the circulatory system, and degenerative diseases. Within a measurable number of years we can look forward with certainty to an increasing general Death Rate.

As far as notifiable diseases go 1931, like 1930, proved to be a year of non-epidemic prevalence. There was a severe epidemic of influenza in the early part of the year, which caused one-twentieth of the total deaths. Twenty-five fewer persons died from tuberculosis than died in 1930. This downward tendency in the Death Rate from tuberculosis has been a prominent feature in Annual Reports for some years. There has been a welcome fall in the number of deaths from cancer, stemming the tendency to rise, which has been a feature of the statistics for some years.

Diseases of the circulatory system have risen by 10 per cent., due, very probably, to the increase of the strain on the mental and physical resources of the people. Circulatory diseases account for one-fifth of the total deaths. Deaths due to respiratory diseases have increased by 30 per cent. due to the epidemic of influenza.

There has been an appreciable fall in the deaths from acute and chronic nephritis.

Comparing the Preston figures with the country as a whole the Birth Rate is practically the same and the Death Rate a little higher. Compared with the 107 Great Towns the Birth Rate is slightly lower and the Death Rate slightly higher, the difference in the Death Rate being accounted for by the excessive prevalence of Influenza.

Attention is drawn to the work done under the Blind Persons Act, 1920. For some time past an increasing interest on the part of medical and lay workers has been evident, and the preventive aspect of the work, early treatment, increased attention to hygiene, and the prevention of accidents, has received much attention. A recent report by an authoritative committee recommends, in addition to the examination of the eyes of blind folk, a systematic general examination, including laboratory methods, directed towards the discovery of the cause of blindness in each case, and of furthering prevention and treatment. The care of the blind entails a surprisingly large item in the Council's expenditure, absorbing as it does over a 2d. rate. There is little probability of our being able to count on a material diminution in the number of blind persons in the near future. Activities with regard to maternity and child welfare have largely removed gonorrhœal ophthalmia in infants as a large cause of blindness, and a slight diminution in numbers may be looked for as caused by excessive consumption of alcohol, by syphilis, and by industrial toxæmias. Cataract, degenerative changes in the eyes in elderly people, and industrial and other accidents are, however, not likely to decrease.

The detailed report compiled by Major Finch with regard to the supervision of food is worthy of study. His comments on the failure of continued and co-ordinated efforts to stamp out tuberculosis infected milk have a despairing ring. He has now joined the pessimists, and considers that safety is only to be got by universal pasteurisation. Pasteurisation has recently been adopted as the policy of the Manchester City Council. It is fully enforced in 26 large American cities, and in New York, where 98 per cent. of the milk is pasteurised, and the remainder certified, it is estimated that the bovine type of tuberculosis in children has declined by two-thirds during the last ten years.

This part of the report also contains reference to inadequacies of lighting, water supply, and facilities for cleansing persons and instruments of those engaged in slaughtering at the public abattoir. These deficiencies affect the quality of the meat produced there, and the efficiency of its examination by the meat inspector.

Other points arising are the immense range of articles of food sampled, and the comparatively small number sold to the disadvantage of the purchaser, together with the steady increase of the scope of the work as the legislative net is cast further, and more and more articles are brought under control.

The obligations assumed by the Health Committee in appropriating the Poor Law Hospital for Public Health purposes must not be lightly estimated. The problem here is the equipment and management of an institution used for many years for the treatment of the sick poor in such a manner as to be able to meet the needs of a wider public. A happy solution will not lose sight of the fundamental needs of the destitute sick. It will supplement and not compete with the work of institutions carrying out their charitable functions to the complete satisfaction of the people of the district.

Landmarks in the School Medical Service are the opening of the Cuttle Street Health Centre and the Nursery School. The provision of a full scheme of special clinics, although approved by the Council, must await happier times.

The Nursery School in Stoneygate may be said to provide education and a certain amount of nurture for pre-school children. To the inward eye there is to be seen, in sordid surroundings, and amid dire poverty, a beautiful building nobly equipped and sympathetically staffed offering to the "least of these" the jewels of light and love.

The report prepared by the Dental Surgeons illustrates forcibly the ill-effects of the prolonged depletion of the staff due to illness. Not only was the progress of the work directly delayed, but the resulting increased amount of dental caries due to the long interval between inspections, has had a cumulative adverse effect on the scheme. Notwithstanding the handicaps mentioned, it is hoped to complete the 1931 inspection by July, 1932, and the next inspection, with an additional age group, and the undertaking of dental inspection in Secondary Schools in an even shorter time.

Social Services tend to grow; altering, amending and improving as the needs of the people dictate. This growth has been carefully fostered by the understanding and sympathy of the members of the Council, for which I should like to offer thanks, personal and on behalf of the staff.

F. A. SHARPE,
Medical Officer of Health.

Cost of Services.

The following figures as to the cost of the Health Services are summarised from the annual report of the Borough Treasurer for the year ended March 31st, 1931 :—

						Expenditure			Income		
						£	s.	d.	£	s.	d.
Maternity and Child Welfare	...	...	...	...	...	7207	17	5	936	5	5
Meat Inspection	...	...	...	...	...	1100	10	9	123	16	9
Public Health	...	...	...	...	...	7173	4	3	1640	7	4
Disinfecting	...	...	...	...	...	1023	9	8	652	10	9
Vaccination	...	...	...	...	...	382	5	0	0	9	10
Port Sanitary	...	...	...	...	...	501	17	7	109	2	1
Elswick Hospital	...	...	...	...	...	1305	4	0	17	10	0
Isolation Hospital	...	...	...	...	...	8187	4	4	350	10	4
Venereal Diseases	...	...	...	...	...	1752	8	9	544	3	5
Treatment of Tuberculosis	...	...	...	...	...	9815	7	2	317	13	4
Contagious Diseases of Animals	...	...	...	...	...	254	0	6	...		
Food and Drugs Act	...	...	...	...	...	574	16	4	...		
Housing of Working Classes	...	...	...	...	...	471	9	9	45	5	5
Medical Inspection and Treatment (Elem. Education)	...	...	...	...	...	5977	4	11	382	15	1
Medical Inspection (Higher Education)	...	...	...	...	...	260	0	0	...		
TOTAL	...	...	...	...	...	45987	0	5	5120	9	9

~~The figures include the grants from the Ministry of Health with regard to Maternity and Child Welfare, Venereal Diseases, Tuberculosis and Port Sanitation.~~

~~The totals for the previous two years were as follows:—~~

~~Year ending March 31st, 1929 :—~~

~~Expenditure—£42,556 1s. 5d.~~

~~Income—£13,546 8s. 10d.~~

~~Year ending March 31st, 1930 :—~~

~~Expenditure—£44,998 10s. 4d.~~

~~Income—£15,093, 4s. 9d.~~

I.—Statistics and Social Conditions of the District.

1931 Census.

The following information appears in the Preliminary Report of the Registrar General on the Census of England and Wales, 1931. Area in statute acres, land and inland water, 4,029.

Population.

	Persons.	Males.	Females.
1921 ...	117,406	53,993	63,413
1931 ...	118,839	55,094	63,745

Arranged in order of size and population, Preston is 43rd in the list of towns. In Lancashire it is surpassed by Liverpool, Manchester, Salford, Bolton, Oldham and Blackburn. In the intercensal period, 1911-1921, the population, 117,088, increased by 0.3 per cent. to 117,406, and in the next decennium by 1.2 per cent. to 118,839.

	1927-28	1928-29	1929-30	1930-31*	1931-32*
Rateable Value ...	£633,122	£639,810	£705,649	£630,224	£628,789
Sum represented by a penny rate ...	£2,400	£2,450	£2,675	£2,400	£2,460
	s. d.	s. d.	s. d.	s. d.	s. d.
Total Rates levied ...	13 0	13 0	12 2	12 6	12 6
Rate for Public Health	0 10 $\frac{1}{8}$	0 10 $\frac{1}{8}$	0 9 $\frac{1}{2}$	1 3 $\frac{3}{4}$	1 5 $\frac{7}{8}$
„ Highways ...	1 7 $\frac{1}{8}$	1 5 $\frac{3}{4}$	1 5 $\frac{1}{4}$	1 10 $\frac{1}{8}$	1 8 $\frac{1}{2}$
„ Scavenging ...	0 5 $\frac{3}{4}$	0 5 $\frac{1}{8}$	0 4 $\frac{5}{8}$	0 5 $\frac{3}{8}$	0 5 $\frac{3}{8}$
„ House Refuse...	0 9 $\frac{1}{4}$	0 7 $\frac{3}{4}$	0 7 $\frac{1}{4}$	0 8 $\frac{1}{4}$	0 8 $\frac{1}{2}$
„ Sewerage ...	0 6 $\frac{3}{4}$	0 7 $\frac{1}{2}$	0 7	0 8 $\frac{3}{8}$	0 9 $\frac{1}{4}$

	Total	Males	Females	Birth Rate
Live Births—Legitimate	1802	914	888	15.00
„ Illegitimate ...	79	39	40	0.65
No. of Still Births ...	89	Rate per 1,000 Total Births 47		
Deaths—Nett ...	1,661	Rate 13.83		
Percentage of Total Deaths occurring in Public Institutions				31.13
Number of Marriages—1043.		Marriage Rate—8.68.		

Number of women dying in, or in consequence of, child birth :—

From Sepsis—5. From other causes—5.

Deaths of infants under one year of age per 1,000 births :—

Legitimate—83. Illegitimate—215. Total—88.

Deaths from Measles at all ages	...	...	...	6
„ Whooping Cough	...	...	...	8
„ Diarrhoea (under two years)	...	...	...	9

* The rates for 1930-31 and for 1931-32 were levied on the reduced rateable value, in accordance with the provisions of the Local Government Act, 1929, which Act also considerably affected the cost of Public Assistance and of the Health and Highways services, the grants in aid of the latter being merged in the New Exchequer Grant.

1. Public Health Officers of the Authority.

(a) MEDICAL.

Medical Officer of Health, School Medical Officer, Port Medical Officer, Tuberculosis Officer	... ..	F. A. Sharpe, M.D. (LOND.), B.S., D.P.H.
Deputy Medical Officer of Health, Clinical Tuberculosis Officer	... ..	J. Walker, M.B., CH.B., D.P.H. (VICT.).
Assistant School Medical Officers	...	R. G. Keays, M.B., B.CH., B.A.O. (DUB.), D.T.M. and H. (ENG.). M. E. Cliffe, M.B., CH.B. (MANCH.), D.P.H. (LOND). App. September, 1931.
Dental Surgeons	... ..	J. C. Knowles, L.D.S. W. A. Lilley, L.D.S., B.D.S. G. Williams, L.D.S. (Honorary) A. Berry, L.D.S.
Assistant Medical Officer for Maternity and Child Welfare	... ..	E. E. Critchley, M.B., CH.B. (EDIN.).
Ophthalmic Surgeon	... (Part-time)	Walter Sykes, M.R.C.S., L.R.C.P.
Orthopædic Surgeon	... (Part-time)	B. L. McFarland, F.R.C.S. (ENG.).
Venereal Diseases Officer	... (Part-time)	W. H. Pimblett, M.B., C.M. (EDIN.). Preston Royal Infirmary.
Pathologist	 (Part-time)	F. B. Smith, M.C., M.A., M.D., B.CH. (CANTAB.), Preston Royal Infirmary.
Medical Officer, Sharoe Green Hospital	...	W. N. Chisholm, M.B., CH.B., F.R.C.S. (EDIN.).
District Medical Officers and Public Vaccinators	 (Part-time)	D. J. Davies, M.B., B.S. (LOND.), B.SC. (WALES), M.R.C.S., L.R.C.P. T. Pimley, M.B., C.M. (ABERD.). M. W. Talbot, M.B., C.M. (EDIN.). F. L. Rigby, M.B., CH.B. (EDIN.). W. Ainsley, L.R.C.P., L.R.C.S. (EDIN.), L.R.F.P.S. (GLAS.). W. H. Pimblett, M.B., C.M. (EDIN.).

(b) OTHERS.

Veterinary Officer	... ..	Richard Finch, M.C., F.R.C.V.S., D.V.S.M.
Borough Analyst	... (Part-time)	W. H. Roberts, F.I.C.
Sanitary Inspectors	... ..	E. L. Crossthwaite,* J. B. Morgan,** J. B. Cook,* T. Lindsay,** W. E. Weir,**† E. Owen,* For Food W. R. White,** Port Sanitary H. S. Holden.*
Vaccination Officer	... ..	H. Smith.

Health Visitors, School Nurses, and Tuberculosis Nurses	M. M. Bottomley, E. A. Cooper, L. Ross, E. Park, D. Lafferty, J. Mortimer, R. Cole, M. E. Marsden (deceased 14th July, 1931), A Butterfield, D. G. King, G. Whalley, M. E. Booth, E. B. Pilkington, G. Downing, F. B. Harrop, G. Spencer (Masseuse).
Matron, Infectious Diseases Hospital ...	Miss J. G. Booth.
Matron, Chestnuts Sanatorium	Miss F. Keene.
Superintendent Nurse, Sharoe Green Hospital	Miss J. M. Partridge. Resigned March 31st, 1932. Miss M. Blundell, Appointed Matron, April 1st, 1932.
Chief Clerk	W. Sharp.
Clerical Staff	H. Beggs, F. Garlington, C. Pomfret**, R. Harrison, C. Blakeley, N. S. Walker, M. Barnett, T. Gray, M. Chapman (deceased), 20th June, 1931), D. Pendlebury, V. Bateson, I. Knowles and I. Pinder.

*Denotes holder of Certificate of the Royal Sanitary Institute.

**Also Certificate of the Royal Sanitary Institute for Meat and other foods.

† „ Smoke Inspector's Certificate of the R.S.I.

2. Nursing in the Home.

(a) General.

The Council contribute £200 per annum to the Preston and District Nursing Association, and is represented on the Committee of Management. The Association is organised into ward committees. The Provident Scheme provides a substantial portion of the revenue. The work during 1931 shewed a large increase over that done in 1930. The organisation is well supported, and is increasing its scope of usefulness and service. In addition to the above Association, the Roman Catholic Church maintains five nursing sisters, members of religious orders, in the Moorfields Convent, and a similar number in a Home in Moor Park Avenue. Most of these nurses are fully trained; their duties include not only nursing, but such other domestic duties as may arise.

(b) Infectious Diseases.

The Preston District Nursing Association undertakes the nursing of measles, whooping cough, pneumonia, and other cases of infectious disease not usually treated at the Isolation Hospital.

3. Midwives Practising in the Area.

Number of persons with the Certificate of the Central Midwives Board ...	29
Number of bona-fide Midwives (in practice in 1902)	9

The Local Authority does not employ any midwife direct, and no midwives are employed on a salaried basis by the Authority. The Maternity and Child Welfare Committee, under the Maternity and Child Welfare scheme, consider applications for the free or partly free services of midwives. They also arrange to compensate midwives in those instances where a midwife's case is recommended for admission to a Maternity Home.

4. National Health Insurance.

Mr. Irvine R. Dearnley, Secretary to the Preston Insurance Committee, has kindly supplied the following :—

There was a slight increase in the insured population in 1931. The number on the 31st December, 1931, was 59,898, this being more than half the population of the Borough. Of this number 59,291 were members of approved societies, 480 deposit contributors, and the remaining 127 members of the Navy, Army and Air Force Funds.

There was an increase in the number of prescriptions issued during the year 1931, the figure reaching 294,131, the greatest increase being in the first three months. The heaviest month was the shortest month, February, when 33,565 prescriptions were issued by doctors against 25,599 in the year 1930. An increase of 7,966, or nearly 2,000 a week more than the corresponding month in 1930.

The average number of prescriptions issued for each insured person on the doctors' lists was 5.3, an increase of .3 prescriptions per person, and indicates illnesses of longer duration.

The total drug bill in respect of prescriptions dispensed by chemists in 1931 was £10,112 2s. 10d., and the average cost per insured person was 3s. 7½d., as against 3s. 6½d. in 1930, 3s. 10d. in 1929, and 3s. 11.7d. in 1928.

The Insurance Committee record their appreciation of the co-operation of the Health Committee of the Preston Town Council, particularly through the Chairman of that Committee (Mr. Alderman R. Durham). As a result of his efforts in the year under review an arrangement was entered into with the Preston Royal Infirmary whereby the services of the Pathological Laboratory were placed at the disposal of insurance practitioners for free examinations and reports on specimens.

The Testing of Medicines Scheme was continued. During the year 14 tests were taken at entirely different chemists' establishments and reported on by an independent analyst in London. In no case was a "hearing" necessary, the prescriptions being either accurately dispensed or the discrepancies negligible.

Including assistants and the resident doctor at the Medical Association there were 57 doctors on the Insurance Committee's List on the 31st December, 1931. At the same date there were 36 chemists' establishments within the Borough undertaking insurance service.

The following list of prescriptions for the year 1924-1931 inclusive forms a useful record for comparison.

Year.	Population.	Insured Persons.	No. Issued.
1924	123,100	57,836	269,611
1925	122,900	57,838	270,312
1926	124,200	58,787	290,506
1927	127,100	59,155	324,636
1928	127,100	59,437	307,583
1929	126,100	59,882	297,467
1930	126,100	59,833	280,924
1931 (Unrevised)	118,839	59,898	294,131

5. Poor Law Medical Out-Relief.

The duties of a District Medical Officer as laid down in the Public Assistance Order, 1930, are as follows :—

The District Medical Officer shall :—

- (1) attend duly and punctually upon all poor persons within his district requiring medical attendance, and, subject to the terms of his

- appointment, supply the requisite medicines to such persons, when lawfully required to do so by a written order of the Council, or of a Relieving Officer, or by the exhibition to him of a medical relief ticket by or on behalf of a poor person on the permanent medical relief list ;
- (2) inform the Relieving Officer forthwith of the name and address of any poor person whom he may have attended without an order ;
 - (3) keep a record, termed the District Medical Officer's relief book, in Form II. in the First Schedule, of his attendances upon poor persons under his care, and submit it to the appropriate committee at every meeting.
 - (4) permit any Relieving Officer to inspect this book at the end of every half-year.
 - (5) give to the Council, when required by them, any reasonable information respecting the case of any poor person who is, or has been under his care, and certify in writing, on the request of the Council, or of a Relieving Officer, or of the poor person on whom he is attending, the sickness of the poor person, or other cause of his attendance on him.
 - (6) on the admission to an institution or hospital of any poor person under his care, supply the Medical Officer thereof, with such information as may be in his possession as to the medical history of the case ;
 - (7) furnish to the Medical Officer of Health for this district such information as the Minister or the Council may from time to time direct with respect to cases of sickness or death amongst poor persons under his care.
 - (8) name to the Council some duly qualified medical practitioner who will, in the case of his absence or other hindrance to his personal attendance, act in his place ; and
 - (9) in making entries in books, record papers, or other records, employ the terms used in the volume prepared by a joint committee appointed by the Royal College of Physicians of London, and entitled "The Nomenclature of Diseases."

The Borough is divided into the following districts :—

District.			Population. (Est. Mid. 1931.)
Dr. F. L. Rigby ...	No. 1	Maudland & Ashton Wards	18824
Dr. M. W. Talbot...	No. 2	Park & Trinity Wards ...	24501
Dr. W. Ainsley ...	No. 4	Moorbrook & St. Peter's Wards	20526
Dr. D. J. Davies ...	No. 6	Fishwick, Ribbleton, and Deepdale Wards ...	28637
Dr. W. H. Pimblett	No. 7	Christ Church, Avenham, & St. John's Wards ...	27612
			120100

The Medical Officers paid 3,434 visits to patients in their homes, and held 1,064 consultations in their respective surgeries.

Poor Law Relief.

Mr. Thomas H. Bentham, Public Assistance Officer, has kindly supplied the following information :—

Outdoor relief paid in respect of the Borough :—

Year							Amount		
							£	s.	d.
1921	...	...	...	...	...	...	12133	16	0
1922	...	...	...	...	...	...	11692	1	7
1923	...	...	...	...	...	...	4384	12	11
1924	...	...	...	...	...	...	7253	17	1
1925	...	...	...	...	...	...	9105	8	7
1926	...	...	...	...	...	...	12137	0	6
1927	...	...	...	...	...	...	11924	10	3
1928	...	...	...	...	...	...	11123	3	10
1929	...	...	...	...	...	...	9764	13	1
1930	...	...	...	...	...	...	7974	7	2
1931	...	...	...	...	...	...	10615	2	10

6. Laboratory Facilities.

Pathological Examinations are carried out at the laboratory maintained at the Preston Royal Infirmary by the Board of that Institution, in charge of Dr. F. B. Smith, Pathologist. A numerical summary of the work undertaken for the Preston Council is as follows :—

No. of samples of milk examined for Tuberculosis	...	...	...	375
No. of samples of milk examined for B. Celi	...	...	...	370
No. of swabs examined for B. Diphtheria	...	...	...	712
No. of examinations of pus for Gonococci	...	...	...	31
No. of examinations of urine	...	...	...	5
No. of examinations of Cerebro-spinal Fluid	...	...	...	1
No. of examinations of blood	...	...	...	5
No. of examinations of urine and blood for B. Paratyphosus	...	...	...	10
No. of examinations of Faeces	...	...	...	2
No. of examinations for Spironema Pallidum (ulcer)	...	...	...	1
No. of examinations of Sputa for B. Tuberculosis	...	...	...	405

7. Legislation in Force.

Local Acts, special Orders, general adoptive Acts, and Bye-Laws relating to the public health, in force in the area.

Preston Markets Act, 1861.

Preston Improvement Acts, 1869 and 1880.

Preston Corporation Acts, 1900, 1914, 1921, 1929 and 1931.

Ribble Navigation and Preston Docks Acts, 1883, 1888, 1889, 1890, 1892, 1896 and 1905.

Preston Waterworks Act, 1853 and 1904.

The Public Health Acts (Amendment) Act, 1890. Part III.

The Public Health Acts (Amendment) Act, 1907 :—

Sections 15, 17, 19, 20, 21, 22, 23, 24, 26, 27, 28, 30, 31 and 33, Part II.
(Streets and Buildings).

Sections 34, 35, 36, 37, 38, 43, 44, 45, 46, 49, 50 and 51, Part III.
(Sanitary Provision).

Sections 53, 54, 56, 57, 59, 60, 62, 63, 64, 65, 66 and 68, Part IV.
(Infectious Diseases).

Part V. (Common Lodging Houses.)

Sections 79, 81, 85 and 86, Part VII.

Part VIII.

Sections 93 and 95, Part X. (Miscellaneous).

Infectious Diseases Prevention Act, 1890.

The Public Libraries Acts.

The Baths and Washhouses Acts.

Bye-Laws with respect to Nuisances, 24th February, 1914.

Bye-Laws with respect to New Streets and Buildings, 12th November,
1926.

Bye-Laws with respect to Houses Let in Lodgings, 12th March, 1929.

Bye-Laws with respect to Common Lodging Houses, revised 10th June,
1931.

8. Hospitals.

Preston Royal Infirmary.

The principal General Hospital in the district is the Preston Royal Infirmary, a voluntary hospital of some 292 beds, with a convalescent home for men at "The Willows," Ashton, 26 beds, and for women and children at Lostock Hall, 46 beds; 364 beds in all. The hospital offers a complete range of service, is adequately equipped, and fully staffed both by residents and non-residents and honorary medical officers. Mr. J. Gibson, Superintendent Secretary of the Infirmary, has kindly supplied the following details :—

" The number of in-patients treated during the year was 5,365, as against 5,367 in the previous year. The daily average number of beds occupied at the Infirmary was 254, compared with 258, and the average length of stay 17.2 days.

Six hundred and twenty-seven of the patients were transferred to the Lostock Hall Convalescent Hospital for Women and Children, where the average daily occupation of beds was 39.4, and the average stay of the patients 22.9 days. 515 patients were also transferred to " The Willows " Convalescent Hospital for Men in Pedder's Lane, Ashton-on-Ribble, where the daily occupation of beds was 23.4, and the average stay was 16.6 days each.

The Bacteriological and Pathological department was reorganized and placed under the full-time direction of F. B. Smith, M.D. (Cambridge); since the 1st October, 1930, the bacteriological and pathological services of the Corporation have been carried out by this department.

Last year's record in the Out-Patients' department has been exceeded—25,492 patients were treated (an increase of 1,985), including 8,624 accident and casualty cases, 3,591 eye, ear, nose and throat, 2,630 surgical, 657 artificial sunlight, 461 pre-natal, 545 pathological and 56 visited at home, 593 medical, 2,251 dental, 3,664 X-ray, 1,242 massage and electrical, and 1,178 venereal diseases.

The total expenditure of the infirmary was £47,498 10s. 5d., of which £40,251 2s. 6d. represented ordinary maintenance, and £7,247 7s. 11d. extensions, improvements and special equipment. The total income was £47,004 6s. 7d."

The Corporation have made arrangements with the Preston Royal Infirmary for the operative treatment of tonsils and adenoids, for the treatment of venereal diseases, certain types of surgical tuberculosis, and for the admission of maternity cases.

St. Joseph's Hospital, Mount Street, the Isolation Hospital, the Chestnuts Sanatorium and Sharoe Green Hospital, were described, and a tabular statement of the accommodation given in the report for 1930.

Appropriation of the hospital part of the Preston Institution, as provided for by Section 95 of the Public Health Acts (Amendment) Act, 1907, was made effective on April 1st, 1932.

9. Maternity and Nursing Homes.

The following action has been taken by the Local Supervising Authority under the Nursing Homes Registration Act, 1927.

There were eight in operation at the end of 1930, and one new one was granted during 1931 with accommodation for two cases. There were no cancellations. Two applications were made, and exemptions granted, under Section 6 of the Act.

10. Maternal Mortality.

The enquiries instituted on behalf of the Maternal Mortality Committee set up by the Ministry of Health have been continued. In the case of women transferred from the County district to a Nursing Home within the Borough, that part of the enquiry relating to events which took place within the Borough is reported upon by the Borough Medical Officer, and forwarded to the County Medical Officer of Health for his report on events which took place before removal to a nursing home. A similar arrangement operates in the case of deaths of Borough residents which take place in Sharoe Green Lane or other maternity homes outside the Borough. Details of these inquiries are given in the Maternity and Child Welfare section of the report. Every notified case of puerperal fever and puerperal pyrexia is the subject of an enquiry.

11. Institutional provision for unmarried mothers, illegitimate infants and homeless children.

There is no provision for unmarried mothers other than that provided by the Public Assistance Committee. Illegitimate infants and homeless infants are maintained in the children's nursery in the Preston Institution up to the age of three years, and over that age, Roman Catholic children are maintained at the St. Vincent's Orphanage for Boys, and the Moorfield Convent for Girls. Protestant Boys and Girls are maintained at the Cottage Homes, Brockholes View. In September, 1931, the Council decided "That financial assistance granted by the Council to expectant mothers by way of the provision of maternity home accommodation, be granted solely through the Maternity and Child Welfare Committee."

12. Institutional Provision for Mental Defectives.

Educable children are provided for by the Education Committee. Children between 7 and 16 years of age and educable and requiring institutional care are provided for at Calderstones Certified Institution, at Allerton Priory and at Pontville, Ormskirk. Idiots and imbeciles are provided for by the Lancashire Mental Hospitals Committee. Male adult defectives are accommodated at the Ribchester Institution, and female defectives at the Preston Institution.

13. Ambulance facilities.

(a) An ambulance is maintained at the Isolation Hospital for the removal of cases of infectious disease.

(b) There is a service maintained at the Fire Station for accident cases and urgent removals to hospital; there is also an ambulance maintained at the Preston Royal Infirmary for conveyance of patients to and from the convalescent homes, and an ambulance at the Preston Institution for the conveyance of patients into the hospital or to other institutions.

14. Clinics and Treatment Centres.

There are no out-patient departments under the control of the Local Authority. The various clinics and treatment centres were shown in the tabular statement in the report for 1930.

15. Local Government Act, 1929.

The administrative arrangements under the above Act were described in the report for 1930.

16. Blind Persons Act, 1920.

During 1931 68 persons were referred for examination and report. Forty-nine persons were certified as being blind within the meaning of the Act, that is to say, too blind to perform any work for which eyesight is essential. The

remaining 19 were not so certified. The primary causes of blindness in the persons certified were as follows :—

Cataract in both eyes	12
Cataract in one eye with optic atrophy in the other	3
Cataract in one eye and glaucoma in the other ...	1
Old choroiditis changes with retinal degeneration	8
High myopia	3
Optic atrophy	4
Destruction by accident	4
Destruction by accident of one eye followed by sympathetic optic atrophy in other eye ...	8
One eye removed for ophthalmitis, followed by optic atrophy in the other	2
One eye destroyed by accident, followed by cataract in the other	1
Dislocated lenses	1
Glaucoma	1
Progressive failure of vision	1
	—
	49
	—

Towards the end of March there were the following persons on the Register :—

Number in receipt of assistance	176
Number working in the Fulwood Workshops ...	33
Number training in the Fulwood Workshops ...	11
Number of Preston children in the Fulwood School	7
Number of home workers	3
	—
	230

In addition to these, there are three blind children in other Institutions.

In addition to the expenditure of £5,019 8s. 5d. in allowances to Blind Persons, grants to the Fulwood Home, etc., the Education Committee disbursed £451 16s. 9d. to the Fulwood Home in respect of seven children, and £175 18s. 9d. in respect of three children at the Catholic Blind School, Liverpool.

17. Industrial Situation, April, 1931—March, 1932.

Mr. T. Hall, Superintendent of the Employment Exchange, has kindly supplied the following :—

“ During the early part of the year under review the employment position was far from satisfactory. Many cotton mills were employed on a short-time basis, and large groups of workers were on the unemployed register for intermittent periods. Employers were finding the utmost difficulty in securing sufficient orders to keep the mills running, even on this short-time system. Towards the latter end of the year, however, a slow and steady improvement appears to have set in. The block stoppages of mills are less frequent than formerly, although there appears to be a great deal of underemployment due to the reduced percentage of machinery running.

During the year there has been a considerable reduction in the number of Relief Schemes of public improvements, on the ground of national economy, and consequently a large number of out-door workers have remained on the register.

The Engineering Trade continues in a very depressed condition, particularly the textile machine manufacturing side of the trade. The constructional side of the trade, which in the early part of the year was moderately busy, has now become very slack.

A considerable number of young men have availed themselves of the facilities for a six months Handyman Course of free training in skilled jobs such as Panel Beating, Motor Mechanics, Plastering, Electric Welding, etc., and several of them have been placed in situations after long spells of unemployment.

In spite of the general trade depression in this area, employers have made ready use of the Exchange, and no less than 5,910 men and 1,480 women have been engaged through the Exchange agency.

Year.	Amount Paid.			
April to March.				
1931-1932	£461,348			
1930-1931	£559,068			
1929-1930	£237,693			
1928-1929	£189,399			
1927-1928	£121,771			
Unemployment.				
1931	Men.	Women.	Boys	Girls.
March	7284	6,617	202	190
April	7,184	6,586	269	295
May	7,001	6,583	238	367
June	7,192	6,618	158	160
July	7,007	6,302	209	224
August	8,459	8,691	337	398
September	8,237	7,080	263	201
October	8,388	6,437	313	329
November	7,729	4,751	204	140
December	7,421	4,048	306	350
1932.				
January	7,444	4,382	253	289
February	7,630	3,961	202	200

Persons on Register. December :—

Year.	Men.	Women.	Boys.	Girls.
1924 ...	2595	910	41	29
1925 ...	2479	710	77	64
1926 ...	5068	6302	136	141
1927 ...	2788	1829	127	111
1928 ...	4580	2446	—	—
1929 ...	5322	5805	213	219
1930 ...	8516	8409	222	309
1931 ...	7421	4048	306	350 "

APPENDIX
TO
SECTION I.

TABLE IA.

WARD	Census 1921	Estimated Population, June, 1931	Nett Deaths	Rate per 1000 living	Births	Rate per 1000 living	Deaths of Infants	Infant Mortality per 1000 born
St. John's ...	11647	11812	170	14.39	181	15.32	20	110
Avenham	7155	7210	99	13.73	106	14.70	6	57
Christ Church	8474	8590	106	12.34	113	13.15	9	80
Ashton ...	9030	9055	111	12.26	127	14.02	12	94
Maudland ...	9641	9769	131	13.41	164	16.79	14	85
St. Peter's ...	11319	11645	166	14.25	166	14.25	17	102
Moorbrook ...	8736	8881	99	11.15	81	9.12	7	86
Park ...	14470	14691	171	11.71	192	13.75	16	83
Trinity ...	9684	9810	165	16.82	171	17.43	14	82
Deepdale ...	10743	11432	151	13.21	237	20.73	11	46
Ribbleton ...	9065	9656	173	17.91	108	17.40	25	149
Fishwick ...	7442	7549	119	15.76	175	23.18	14	80
Unknown ...	...	...	...	...	...	...	...	...
	117406	120100	1661	13.83	1881	15.66	165	88

TABLE IB.

Year.	No. of Births.	Rate per 1000 Living.	No. of Infant Deaths.	Infant Mortality.	No. of Deaths at all ages	Rate per 1000 Living.
Average 1906-1910	3118	26.37	506	161	1904	16.11
Average 1911-1915	2751	23.21	415	151	1992	17.02
Average 1916-1920	2262	18.85	250	112	1759	15.66
Average 1921-1925	2444	19.94	261	107	1687	13.86
Average 1926-30	1982	15.72	185	93	1664	13.17
1931	1881	15.66	165	88	1661	13.83

TABLE IC.

Vital Statistics of whole District during 1931 and previous nine years.

YEAR.	Total Population.	BIRTHS. Nett.		TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
								Und'r 1 yr. of age		At all Ages.	
		Num- ber.	Rate.	Num- ber.	Rate.	of Non- resid'ts regist- ered in the district	of Resi- dents not regist'd in the district	Num- ber.	Rate per 1,000 Nett Births.	Num- ber	Rate.
1922	120,900	2482	20.53	1528	12.64	74	208	242	97	1662	13.75
1923	121,700	2426	19.11	1527	12.54	78	227	238	98	1676	13.77
1924	123,100	2328	18.91	1573	12.78	88	229	225	97	1714	13.92
1925	122,900	2174	17.69	1644	13.38	84	227	286	131	1787	14.54
1926	124,200	2160	17.39	1421	11.44	93	268	195	90	1596	12.85
1927	127,100	1892	14.88	1645	12.93	121	261	206	109	1785	14.04
1928	127,100	1916	15.07	1588	12.49	152	277	175	91	1614	12.69
1929	126,100	1967	15.60	1608	12.75	151	315	205	104	1772	14.05
1930	126,100	1975	15.66	1437	11.40	185	292	145	73	1544	12.24
1931	120,100	1881	15.66	1518	12.63	157	300	165	88	1661	13.83

Total population at all ages 117,406

Number of inhabited houses 27,189

Average number of persons per house.. 4.31

Area of District in acres (Land
and Inland Water)..... 4,029

At Census
of 1921.

TABLE ID.

Causes of Death at Different Periods of Life in the County Borough of Preston.

CAUSES OF DEATH.	Sex.	All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
ALL CAUSES	{ M F	790 871	98 69	19 15	13 16	19 14	30 28	39 42	59 44	81 93	133 142	188 210	111 198
1 Typhoid and paratyphoid fevers ...	{ M F	...	...	...	...	...	...	...	...	...	...	...	...
2 Measles ...	{ M F	4	1	1	1	1	...	...	...	...	...	...	...
3 Scarlet Fever ...	{ M F	2	1	1	1	1	...	...	...	...	...	...	...
4 Whooping Cough...	{ M F	1	...	...	...	...	...	...	...	...	...	...	...
5 Diphtheria ...	{ M F	5	1	1	2	...	...	...	...	...	...	...	...
Influenza ...	{ M F	3	1	2	...	...	...	...	...	...	...	...	...
Encephalitis lethargica ...	{ M F	35	1	2	1	...	...	2	4	6	6	8	5
8 Cerebro-spinal fever ...	{ M F	47	...	1	4	...	1	2	3	5	13	11	7
9 Tuberculosis of ...	{ M F	3	...	...	...	...	...	...	...	...	...	...	...
respiratory system	{ M F	4	3	...	...	...	...	...	...	...	...	1	...
10 Other tuberculous diseases ...	{ M F	41	...	...	...	12	16	9	11	6	1	2	...
11 Syphilis ...	{ M F	41	1	1	1	4	...	10	7	5	2	...	...
General paralysis of the insane, tabes dorsalis...	{ M F	13	...	...	...	...	...	2	1	...	...	...	...
12 Cancer, malignant disease ...	{ M F	7	...	1	...	...	...	...	...	...	...	...	...
13 Cancer, malignant disease ...	{ M F	...	...	...	...	...	...	...	...	...	...	...	...
14 Diabetes ...	{ M F	...	...	...	...	...	...	...	...	...	...	...	...
15 Cerebral hæmorrhage, etc.	{ M F	...	...	...	...	...	...	...	...	...	...	...	...
16 Heart disease ...	{ M F	...	...	...	...	...	...	...	...	...	...	...	...
17 Aneurysm ...	{ M F	...	...	...	...	...	...	...	...	...	...	...	...

TABLE 1E.
Number and Causes of Death in each Ward for the Year 1931.

CAUSE OF DEATH	St. John's Ward	Avenham Ward	Christ Church Ward	Ashton Ward	Maudland Ward	St. Peter's Ward	Moorbrook Ward	Park Ward	Trinity Ward	Deepdale Ward	Ribbleton Ward	Fishwick Ward	TOTALS
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Measles	...	1	...	...	1	...	...	...	2	...	1	1	6
Scarlet Fever	...	...	...	1	...	...	...	...	...	...	...	...	1
Whooping Cough	2	1	...	1	1	1	1	...	...	1	...	...	8
Diphtheria	1	...	...	...	1	1	...	...	...	...	1	...	4
Influenza	9	3	3	5	11	7	7	4	5	9	13	6	82
Encephalitis Lethargica	...	1	1	...	...	1	...	...	...	...	...	...	3
Cerebro-spinal Fever	1	1	...	2	1	1	1	...	...	...	...	...	7
Tuberculosis of Respiratory System	6	7	7	5	5	6	3	8	11	4	11	9	82
Other Tuberculosis Diseases	3	...	2	1	1	4	...	...	1	3	3	3	21
Syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...
Gen. Paralysis of the Insane	...	1	...	...	...	1	...	1	2	...	1	...	6
Cancer, Malignant Disease	15	9	11	13	15	17	14	11	18	21	9	10	163
Diabetes	4	1	1	1	2	1	...	2	4	1	1	2	20
Cerebral Haemorrhage... ..	8	6	5	4	5	9	6	9	6	5	10	3	76
Organic Heart Disease	26	25	23	16	23	31	27	38	32	30	29	17	317
Aneurysm	...	...	...	...	...	...	...	...	1	...	...	...	1
Other Circulatory Diseases	6	5	8	4	3	9	5	17	8	6	9	5	85
Bronchitis	11	4	7	3	1	7	5	7	12	10	6	8	81
Pneumonia, all forms	20	5	8	8	8	21	10	15	17	12	25	6	155
Other Diseases of Respiratory Organs	2	1	1	1	1	1	1	1	2	3	1	...	15
Peptic Ulcer	...	1	1	1	2	1	1	...	1	1	3	1	13
Diarrhoea and Enteritis	2	2	2	1	...	...	...	...	1	1	1	2	12
Appendicitis	...	1	...	1	...	...	...	1	1	1	1	...	6
Cirrhosis of Liver	...	2	1	...	...	...	...	1	1	...	...	...	5
Other Diseases of Liver	1	1	2	1	...	2	...	2	...	...	...	1	10
Other Digestive Diseases	2	2	1	3	1	1	2	3	2	3	4	3	27
Acute and Chronic Nephritis	18	5	6	6	8	11	5	9	13	10	5	11	107
Puerperal Sepsis	...	...	...	1	...	...	...	1	...	...	2	1	5
Other Puerperal causes	...	...	...	1	...	...	...	...	1	2	...	1	5
Congenital Debility and Malformation. Premature Birth	8	...	3	6	8	6	4	9	7	8	12	6	77
Senility	5	4	1	5	8	4	2	5	2	2	8	6	52
Suicide	2	1	...	4	1	1	...	3	...	...	...	3	15
Other Violence	6	3	2	6	3	4	3	7	4	5	2	4	49
Other defined Diseases	12	6	10	10	21	18	2	17	11	13	15	10	145
Causes ill-defined or unknown	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	170	99	106	111	131	166	99	171	165	151	173	119	1661

TABLE II.

Birth-rate, Death-rate, and Analysis of Mortality during the year 1931.
(Provisional figures).

(The mortality rates for England and Wales refer to the whole population, but for London and the towns to civilians only.)

	RATE PER 1000 TOTAL POPULA- TION		ANNUAL DEATH RATE PER 1,000 POPULATION								RATE PER 1,000 LIVE BIRTHS		PERCENTAGE OF TOTAL DEATHS				
	Live Births	Still- births	All Causes	Enteric Fever	Small Pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis (under 2 years)	Total Deaths under One Year	Certified by Registered Medical Practitioners.	Inquest Cases	Certified by Coroner after P.M. No Inquest.	Uncertified Causes of Death
England and Wales...	15.8	0.67	12.3	0.01	0.00	0.08	0.01	0.06	0.07	0.36	0.54	6.0	66	91.18	6.17	1.70	0.95
107 County Boroughs & Great Towns, including London.	16.0	0.67	12.3	0.00	0.00	0.10	0.01	0.07	0.08	0.33	0.48	8.4	71	91.43	5.84	2.24	0.49
159 Smaller Towns (1921 Ad- justed Popul'ns. 20,000-50,000)	15.6	0.73	11.3	0.00	0.00	0.07	0.01	0.05	0.05	0.36	0.43	4.0	62	92.17	5.49	1.25	1.09
London	15.0	0.50	12.4	0.01	0.00	0.03	0.02	0.07	0.06	0.26	0.57	9.7	65	89.52	6.23	4.24	0.01
County Borough of Preston...	15.66	0.74	13.83	0.01	0.00	0.05	0.01	0.07	0.03	0.68	0.41	4.8	88	91.91	5.23	0.42	2.41

The maternal mortality rates for England and Wales are as follows : { per 1,000 Live Births ... Puerperal Sepsis. Others. Total.
 { " " Total Births ... 1.66 2.45 4.11
 { " " " 1.59 2.35 3.95

II.—Sanitary Circumstances of the District.

A.—WATER SUPPLY.

The water supply was described in the report for 1920. The work authorised under the Preston Corporation Act of 1921 is now in hand. The new intakes in the Langden Valley and in the Hareden Valley are completed.

The construction of the new reservoir at Longridge is progressing satisfactorily.

The following report was made by the Borough Analyst upon a sample of the town's water submitted on January 15th, 1932.

Parts per 100,000.				
Total solid matter in solution	...	...	...	6.32
Oxygen required to oxidize in 15''	...	...	...	0.051
Oxygen required to oxidize in 3 hours	...	...	...	0.101
Ammonia	...	...	...	0.001
Ammonia from Organic Matter by distillation with alkaline permanganate	...	...	...	0.004
Nitrogen as Nitrates	...	...	...	None
Nitrogen as Nitrites	...	...	...	None
Combined Chlorine	...	...	...	0.90
Total Hardness	...	...	...	3.30

The sample was clear, faintly yellow and odourless. It contained a minute trace of suspended matter which consisted of vegetable débris, hydrated oxide of iron, particles of siliceous matter, diatoms, algae, small infusoria, and a few rotifera.

The water is a very good soft upland surface water, well suited for drinking and all domestic purposes.

Reaction to litmus " faintly " alkaline.

(Signed) W. H. ROBERTS, M.Sc., F.I.C.,
Borough Analyst.

With a view to ascertaining whether any danger to the community exists by reason of the solvent action of the town's supply upon new lead pipes, an analysis for the presence of lead was made of the water supplied to a new corporation house, with the following results :—

1. Immediately on piecing up with the main. Result—1/180th grain per gallon.

2. From the same tap, after the water had stood in the pipe for 24 hours, none having been drawn off in the interval. Result— $\frac{1}{3}$ grain to the gallon.

3. From the same tap 48 hours after sample No. 2. During this period the water had been continually drawn off for the usual domestic purposes. Result— $\frac{1}{180}$ th grain per gallon.

4. From the same tap 72 hours after sample No. 3, during which period the water had been continually drawn off for domestic purposes. Result— $\frac{1}{180}$ th grain per gallon.

The amounts found in samples Nos. 1, 3 and 4 may, for practical purposes, be disregarded. Sample No. 2, however, contains $\frac{1}{3}$ grain per gallon, considerably more than an amount which, if regularly consumed, would give rise to lead poisoning ($\frac{1}{10}$ th grain per gallon). Soft water containing dissolved oxygen, in contact with the bright lead of a new pipe, forms an oxide of lead, which is rapidly dissolved in the presence of faint acidity. Preston water usually gives an alkaline or neutral reaction, so that the action is not continuous. Occupants of new houses should, however, on entering, run off the first gallon or so of water before drawing off for personal consumption.

B.—CLOSET ACCOMMODATION.

There are approximately 31,255 fresh-water closets, 427 waste water closets, 12 trough closets (exclusive of those in use at schools) and 25 privy middens, all of which latter are situated on farms and cottages in the rural parts of Ashton, Deepdale, Ribbleton and Fishwick Wards, and are not within reach of a sewer.

The sanitary conveniences in use at factories and workshops, and schools, are not included in the above.

C.—SCAVENGING.

The system in force was described in the report for 1920. The work has been carried out satisfactorily. The majority of the town's refuse is dealt with at Argyll Road and subjected to salvage treatment, which includes machinery for dealing with condemned meat, slaughterhouse refuse, and fish offal.

The following information for the year ended 31st March, 1932, has kindly been provided by Mr. Tye, Cleansing Superintendent :—

Amount of refuse collected—28,341 tons.

This has been dealt with as follows, the weights being approximate :—

Paper, metal, rags, etc., sold	...	...	...	...	1154 tons.
Crude refuse, clinker, etc., sent direct to tips	...	...	...	...	799 „
Dust and cinders separated by screening plant, sold, or					
sent to tips	...	...	...	...	19838 „
Tailings incinerated	...	...	...	...	6550 „

D.—SEWAGE DISPOSAL.

The Borough Engineer's Department has now almost completed the renovation and enlargement of the Sewage Disposal Works.

All the old plant, consisting of a battery of nine Compressed Air Ejectors, together with the two sets of compound horizontal steam engines, have been scrapped; the existing Ejector Chamber has been modified and adapted as a Screening Chamber and Pump Sump.

Adjoining this Sump a new Chamber has been sunk to accommodate the electrically-driven pumps of various capacities.

An auxiliary pipe line, 36 inches diameter, has been laid from the Pumping Station to the Tanks at Freckleton.

At Freckleton a Screening Chamber, three new Detritus Tanks, each 55 feet by 15 feet, and four new Settling Tanks, each 133 feet by 65 feet, have been constructed which, together with the existing tanks, provides a capacity of approximately 2,000,000 gallons.

Practically the whole of the work at the Sewage Farm is completed. At the Pumping Station the Sump is complete, including Screening Plant, and the Pump Chamber is ready to receive the Pumps. When complete, the new scheme will comfortably deal with three times the dry weather flow on the basis of a population of 150,000.

E.—WORK OF THE DISTRICT SANITARY INSPECTORS.

1. Dwelling Houses.

Four thousand and sixty-one inspections and 4,930 re-inspections were made by the district sanitary inspectors, the detail is given in Table IIA at the end of this section.

These inspections and re-inspections involved the sending of 2,090 letters with regard to the common defects, i.e., yard flagging, cleansing and lime-washing, and provision of dustbins. 170 informal notices were served in connection with the surveys under the Housing (Consolidated) Regulations, 1925, and the Housing Act, 1930. There were also 19 statutory notices under the Public Health Acts, and 46 under the Housing Act, served by the authority of the Council. The results of the work are shewn in Table IIB; 3,207 houses in all have been dealt with.

2. Drains.

Two thousand seven hundred and forty-two inspections and 3,558 re-inspections, which are detailed in Table IIA, were made during the year. The work done is detailed in Table IIB.

3. Schools.

Forty-eight visits were made by the sanitary inspectors. In six instances the drains and water closets were repaired, in one a yard surface was repaired, and another, urinal repaired.

4. Factories and Workshops.

The usual tables dealing with registered premises have been forwarded to the respective Government departments, but are not included in this report. 102 defects were found in the course of inspections, of which 100 were remedied.

5. Offensive Trades.

The following offensive trades are established in the Borough :—

Soap Boiler—3 ; Fat and Tallow Melter—5 ; Knackers Yard—1 ; Gut Scraper—1 ; Tripe Boiler—5 ; Fish Fryers—159 ; one new Fish Fryer has been sanctioned.

All these premises are subject to frequent inspection. 526 visits were paid during the year and five nuisances were remedied. The conditions are satisfactory.

6. Pig Keeping.

There are 13 pig keepers in the Borough, of whom nine are farmers. The number of pigs kept varies according to the seasonal trade demands, and ranges from 150 to 400.

The sanitary conditions, especially those relating to the distance from inhabited dwellings, drainage conditions of floors, and buildings, and means of temporary storage of manure are satisfactory. Thirty-six visits were made to the premises.

7. Common Lodging Houses.

There are 17 common lodging houses on the register. The accommodation consists of 753 beds in 119 rooms. The average number of lodgers per night is 384. The premises are visited regularly, 644 visits having been paid by the sanitary inspectors. Many of these houses are ancient and are difficult to maintain in a sanitary condition. The main defects are lack of accommodation for personal ablutions, for storage of personal effects, adequate screening of the rooms occupied by women and means of escape from fire.

The bye-laws made by the Local Authority under Section 80 of the Public Health Act, 1875 have been carried out.

A revision of the bye-laws has been approved by the Council and was approved by the Ministry of Health on June 10th, 1931.

8. Houses Let in Lodgings.

There are approximately 40 houses let in lodgings, comprising 180 separate lets and housing nearly 500 people. These take no account of houses occupied by a tenant or owner and having members of one family only as sub-tenants.

A tabular statement shewing the situation of these houses and accommodation provided appeared in the report for 1930.

Bye-laws were passed under the Common Seal on January 24th, 1929, and approved by the Ministry of Health on March 12th, 1929.

9. The Rag Flock Act.

One sample has been taken and, on analysis, was found to comply with the regulations. Seven visits were made.

10. Rats and Mice Destruction Act.

The advice of the Department was sought by proprietors of infested premises on numerous occasions. Buildings were inspected as follows :—

Factories	...	...	...	...	...	10
Food Preparing Premises	...	...	...	...	...	27
Groups of Dwellinghouses	...	...	...	...	...	118

In 241 instances the cause of invasion was found to be defective drains. In each case the possibility of further infestation was removed by the execution of the necessary repairs. In these operations over 332 rats were destroyed.

The necessary inspections and supervision of the work entailed 748 visits of the staff.

11. Stable Premises and Garages.

These have been the subject of 152 visits. As a result, ten have been cleansed, covers to middens provided in four instances, three old middens abolished and pails substituted, and arrangements made with the Cleansing Department to remove the contents periodically, 11 offensive accumulations have been abolished, and structural repairs carried out in three instances.

12. Theatres and Cinemas.

In 17 theatres and cinemas, of which one is used for theatrical performances and the remainder as cinemas, the seating is as follows :—

Cinemas	...	...	...	16	Total seats	...	17,103
Theatres	...	...	...	1	Total seats	...	2,650
Boxing Booths	...	...	...	1	Total seats	...	2,000
Dancing Halls	...	...	...	18			
Billiard Halls	...	...	...	9			

In accordance with the regulations issued by the Ministry, Circular 120, 25/8/20, each place of entertainment has been visited and a certificate issued to the proprietor for presentation to the Licensing Authority, who require such certificate before they can grant the licence. This certificate must state that the premises are satisfactory in sanitary and other respects. Special attention has been paid to ventilation, cleanliness, condition of the dressing rooms and, in the case of picture houses, the proximity of the front seats to the screen. The standard laid down in the Interim Report of the Joint Committee on Eye-strain in Cinemas appointed by the Illuminating Engineering Society in October, 1919, which has been adopted, was given in the report for 1921.

In two cases cinemas were unsatisfactory as regards sanitary defects, and have been improved.

During the year the district inspectors paid 38 official night visits to places of entertainment, and on each occasion the premises were found to be in a satisfactory condition; 124 day visits were made so that closer attention could be given to the examination of the sanitary conveniences, ventilation and cleanliness.

13. Shops Acts, 1912 and 1913.

The administration of these Acts was transferred to the Police on January 1st, 1924.

14. Vans.

The vans used as permanent residences in the Borough are under constant supervision. At the end of the year there were 69 vans permanently established in the Borough.

During the Whit-Week Fair 26 vans, and at the Christmas Fair 16 vans, visited the town and were stationed in and about the Market Place. They housed respectively 78 and 48 persons. Special arrangements made on their behalf included the daily cleansing of the ground in the early morning by the Cleansing Department and the disinfection of the area. Water supply was specially provided by the Water Department and use made of the public sanitary conveniences in Earl Street, Birley Street and Church Street. During the two periods the sanitary inspectors visited the vans daily and made enquiries as to the health of the inmates. 126 such visits were made.

A recent legal decision (Ruislip-Northwood U.D.C. v. Lee and another) that vans are temporary buildings, and as such are subject to section 27, Public Health Acts (Amendment) Act, 1907, has enabled the Committee to proceed with a scheme for the gradual extinction of these insanitary and badly equipped dwellings. The Committee have arranged that, on suitable alternative accommodation being provided for the tenants, the owner shall cease to allow the van to be re-occupied on pain of having it pulled down.

15. Private Passages.

Eighteen private passages were paved by flagging or asphaltting, drained and doors to entrances provided. The work was enforced by statutory notice in six cases, and in the remainder, by agreement with the owners. The work was given out to local contractors by tender. Total area paved and drained : 770 square yards at a cost of £303 7s. 3d.

16. Miscellaneous.

In addition to the work under the foregoing heads, the following inspections under miscellaneous heads were carried out. These were :—

Offensive accumulations	11 visits
Animals so kept as to cause a nuisance ...	24 visits

17. Smoke Observations.

There are approximately 140 chimneys in the Borough. 145 half-hour observations were made during the year.

With the rapidly increasing complexity of the duties undertaken by a district sanitary inspector, it is difficult to find time for smoke observations. In my opinion, the limit of black smoke allowed, five minutes in half-an-hour, irrespective of the number of boilers to be served by the chimney under observation, is too high and is illogical. The principal reasons for the emission of

black smoke are the use of bad fuel, inefficient stoking, and obsolete plant. It is some years since a case was taken to Court and two years since a statutory notice was served. More drastic action is required.

18. Disinfection.

The disinfectors are responsible for the disinfection of premises after infectious disease and after death from tuberculosis or change of address of persons suffering from tuberculosis. Disinfection of houses was carried out by gaseous and spray disinfection. The spray method was employed in all cases of measles, and fumigation in all other infectious diseases. The total number of houses disinfected was 1,366. Six schools, and 12 other institutions were disinfected, and in 81 other instances goods assembled at various schools were subjected to disinfection before being offered for sale. The number of beds, mattresses, bolsters and pillows removed to the Disinfecting Station for steam disinfection was 210, 116, 263 and 511, respectively. Other articles of bedding treated in this way numbered 241. The number of library books borrowed from the various lending libraries in the town and found at infected houses was 740. The department took possession of these books for the purpose of disinfection and afterwards returned them to the lending library concerned.

19. Canal Boats Acts, 1877 and 1884.

The past year shows no change in the registration or cancellation of boats, the numbers being 58 registered and 29 cancelled, thereby leaving 29 still on the register. Nineteen boats were inspected, an aggregate of 229 visits being paid.

The number of infringements of regulations total 19, and were satisfactorily dealt with. These related mostly to painting and general dilapidations. Legal proceedings were not required in any instance.

The condition of the boats regarding cleanliness was satisfactory. Of the 44 persons in occupation in 1931, six were children under school age. There has been no case of infectious disease reported during the year.

The work of inspection has been carried out by Inspector H. S. Holden in addition to his other duties of Port Sanitary Inspector, no special remuneration being provided for this part of his work.

F.—HOUSING.

That portion of the work of the Public Health Department relating to the fitness of dwellings has been dealt with in Section II E. A summary appears in the appended Schedule.

In the inspections under the Housing (Consolidated) Regulations, 1925, attention is directed to the number of rooms per house, and the number of persons occupying them.

The enquiries show no evidence of gross overcrowding, the average number of persons per house being 3.89, as compared with 4.26 at the 1921 Census, 19 houses (6.4 per cent.) were overcrowded. The occupants of these over-crowded houses numbered 136 or 1.2 per cent. of the whole; the corresponding percentage at the 1921 Census was 7.4.

The Census of 1931 gives the population of the Borough as 118,839, an increase of 1,433 since 1921. The natural increase, that is the excess of births over deaths since 1921, was 5,606.

The houses erected since the 1911 Census are shewn below to amount to 4,701 which, on the basis of 4.26 persons per house—the density at the 1921 Census—is sufficient to house 20,026 persons, and more than allows for the natural increase.

No. of Houses built each year 1911 to 1931.

Year	No.
1911	193
1912	143
1913	142
1914	118
1915	95
1916	45
1917	19
1918	2
1919	1
1920	13
1921	8 + 239 by the Council.
1922	33 + 244 „ „
1923	50
1924	186
1925	367 + 190 „ „
1926	248 + 252 „ „
1927	409 + 110 „ „
1928	278 + 320 „ „
1929	224 + 117 „ „
1930	128 + 280 „ „
1931	135 + 112 „ „
	2837 + 1864 „ „

The following information has been extracted from the minutes of the Housing Committee for January, 1932 :—

HOUSING ACT, 1925.

Total amount of advances	...	...	£581,057	1s. 6d.
Amount outstanding at date	...	...	£438,689	os. 1d.
No. of Houses	...	...	1084	

SMALL DWELLINGS ACQUISITION ACTS.

Total amount of advances	...	...	£198,018	os. od.
Amount outstanding at date	...	...	£129,016	2s. 6d.
No. of Houses	...	...	462	

HOUSING SCHEDULE.

Number of new houses erected during the year :—

(a) Total	247
(b) As part of a municipal housing scheme	112

1.—INSPECTION OF DWELLING-HOUSES.

(1) (a) Total number of dwellinghouses inspected for housing defects (under Public Health or Housing Acts)	4604
(b) Number of inspections made for the purpose	9944
(2) (a) Number of dwellinghouses which were inspected and recorded under the Housing (Consolidated) Regulations, 1925 (included under Sub-head (1) above)	322
(b) Number of inspections made for the purpose	649
(3) Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	3
(4) Number of dwellinghouses (exclusive of those referred to in the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	3402

2.—REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES.

Number of defective dwellinghouses rendered fit in conse- quence of informal action by the Local Authority or their Officers	3207
---	------

3.—ACTION UNDER STATUTORY POWERS.

(A) Proceedings under Sections 17, 18 and 23 of the Housing Act,
1930 :—

(1) Number of dwellinghouses in respect of which notices were served requiring repairs	46
(2) Number of dwellinghouses which were rendered fit—	
(a) by Owners	45
(b) by Local Authority in default of owners	1

(B) Proceedings under Public Health Acts :—

(1) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied	19
(2) Number of dwellinghouses in which defects were remedied—	
(a) by Owners	19
(b) by Local Authority in default of owners	—

(C) Proceedings under Sections 19 and 21 of the Housing Act, 1930.

(1) Number of dwellinghouses in respect of which Demolition Orders were made ... 3

(2) Number of dwellinghouses demolished in pursuance of Demolition Orders ... —

(D) Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925 :—

Number of Dwelling-houses demolished in pursuance of Demolition Orders ... 6

APPENDIX
TO
SECTION II.

TABLE IIa.

House Inspections.	SANITARY DISTRICTS.						Total
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	
Inspected on Complaint ...	413	753	953	1014	318	610	4061
Re Infectious Diseases ...	43	49	52	19	5	53	221
Housing Acts ...	55	54	97	24	...	92	322
TOTALS ...	511	856	1102	1057	323	755	4604
House Re-Inspections.							
Inspected on Complaint ...	621	810	1072	577	675	1175	4930
Re Infectious Diseases ...	31	20	4	5	...	23	83
Housing Acts ...	140	82	62	25	...	18	327
TOTALS ...	792	912	1138	607	675	1216	5340
Drain Inspections.							
	297	431	1203	204	315	292	2742
Drain Re-Inspections.							
	423	378	1303	214	607	633	3558

TABLE IIB.

Summary of Sanitary Improvements effected.

	Public Health Acts. SANITARY DISTRICTS						TOTAL	Housing Acts. SANITARY DISTRICTS						TOTAL
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	
Houses dealt with :—	380	751	932	474	157	413	3107	27	7	60	...	...	6	100
Lighting and Ventilation improved ...	5	65	36	21	2	38	167	18	6	26	...	...	...	50
Roofs reconstructed or repaired	7	81	125	51	11	33	308	15	2	10	...	...	6	33
Floors repaired or relaid	5	22	52	21	2	19	121	19	4	6	...	...	...	29
Fireplaces repaired or provided	5	8	41	12	3	17	86	9	1	14	...	...	2	26
Staircases repaired	...	14	58	13	...	...	85	10	6	9	...	...	6	31
Walls and chimneys pointed and repaired	27	149	148	50	...	50	424	19	4	10	...	...	6	39
Repairs and renewals to W.C. accommodation	40	96	110	40	49	111	446	15	2	7	...	...	1	25
Portable ashpails provided	67	25	151	16	8	62	329	5	2	10	...	...	1	18
New Sinks or other sanitary fittings...	30	22	44	12	26	31	165	4	1	8	...	...	3	16
Yard and lobby pavements repaired...	6	10	49	25	6	13	109	7	...	5	...	...	1	13
Drains tested, repaired or renewed ...	259	288	342	358	94	191	1532	1	1	7	...	...	...	9
Gutters and downspouts repaired or renewed	31	72	66	43	4	44	260	13	4	10	...	...	1	28
Provided with sufficient water supply..	11	...	24	3	...	10	48	1	...	5	...	...	...	6
Plasterwork and limewashing	14	53	129	4	5	46	251	24	2	29	...	...	4	59
General nuisances	6	8	17	20	10	42	103	...	...	...	...	...	...	...

TABLE II.F.

Summary of Work done under the Factory and Workshop Act during the Year 1931.

	No. 1 District	No. 2 District	No. 3 District	No. 4 District	No. 5 District	No. 6 District	Total.
Number of Factories and Workshops on Register	191	347	266	244	199	219	1466
„ Circular Letters sent re Out-workers	...	...	...	...	...	...	...
„ Out-workers reported	...	1	...	...	1	5	7
Visits to Factories and Workshops ...	12	139	57	53	45	136	563
„ Retail Bakehouses	19	41	12	15	12	37	136
„ Public Bakehouses	...	...	...	...	...	...	...
„ Home-workers premises	...	11	...	...	1	5	17
Drains tested	1	3	3	4	...	4	15
DEFECTS FOUND AND REMEDIED :--							
Defective Drains	1	25	3	4	4	2	39
„ Slopstone Pipes	...	...	...	...	...	...	...
„ Spouts and Roofs	...	4	3	...	...	...	7
„ Water Closets	1	4	2	3	1	...	11
„ Yard Pavement	...	1	1	...	...	...	2
Limewashing required	3	15	3	...	...	...	21
General Nuisances	...	1	1	...	...	3	5
Insufficient W.C. accommodation for Females	...	...	...	1	...	1	2
Insufficient W.C. accommodation for Males	...	5	1	2	...	...	8
No receptacle for refuse	...	...	...	...	...	...	...
Manure Accumulations	...	...	1	...	...	...	1
Overcrowded	...	...	...	...	...	...	...

Total defects found, 97 ; remedied, 95.

III.—Port Sanitary Administration.

A.—PORT SANITARY DISTRICT.

The Port Sanitary district of Preston extends from Formby Point on the south, to a point about 2,350 yards south of the Victoria Pier, South Shore, Blackpool, on the north. The dock, which is 3,200 feet long by 600 feet wide, covers 40 acres, and is approached by the entrance basin, 850 feet long by 300 feet wide, which covers $4\frac{3}{4}$ acres.

The communicating locks are 550 feet long and 66 feet wide, with a depth of 29 feet 6 inches at high water ordinary spring tide. The docks are situated in the Borough, and are about 16 miles up the River Ribble from deep water at the bar.

The quays are $1\frac{1}{2}$ miles long. There are 170 acres of storage ground and 37,489 superficial yards of covered floor space.

The dock is equipped with hydraulic and steam cranes, and has ample railway facilities.

The cattle lairage accommodates 800 cattle, and 1,600 sheep or pigs.

1. Amount of Shipping entering the Port during 1931.

1474 ships, of which 219 were foreign, entered the port. The details showing the tonnage, classification, etc., coastwise and foreign, and the method of propulsion, is shown in Table IIIA at the end of this section.

2. Character of Trade of Port.

(a) There is no passenger traffic.

(b) Cargo traffic is principally with the Irish Free State, Norway, France, the Baltic Ports and other countries, as detailed in Table IIID at the end of this section.

The principal exports are coal, coke, machinery and salt cake.

3. Source of Water Supply.

(a) The port derives its water from the town supply, an upland surface water of good quality.

(b) Vessels are supplied from the above source.

(c) Water boats are not used.

4. Infectious Disease.

Vessels arriving with cases of cholera, plague or yellow fever, and vessels which, though not infected, have been so infected within, in the case of cholera and plague, a period of seven days, and in the case of yellow fever, 18 days, are inspected in the case of vessels coming to Preston at the centre of the Albert Edward Dock, and in the case of vessels coming to any other part of the port at the " Gut Gas Buoy " situate at the Bar.

Vessels arriving from suspected ports are inspected upon the request of H.M. Customs Officer.

All vessels are visited upon arrival by the Port Sanitary Inspector.

The following arrangements for notification of the Port Sanitary Authority of the arrival of inward vessels requiring special attention are in operation.

H.M. Customs and the Pilots are in touch with shipbrokers who have wireless and other information as to probable time of arrival.

The barge repair depôt in the river just below Lytham about $9\frac{1}{2}$ miles from Preston, is in telephonic communication with H.M. Customs and the Pilots.

All vessels are boarded by the Port Sanitary Inspector and some by the Port Medical Officer as detailed above.

The following arrangements for the disposal of cases of infectious disease and for observation or surveillance of contacts are in being.

Cases of infectious disease are removed to a special ward at the Borough Isolation Hospital approved for the purpose by the Ministry of Health.

Contacts will be kept under observation or surveillance on the ship by the Port Medical Officer.

Infected quarters are disinfected by fumigation by sulphur dioxide by the Port Sanitary Inspector. Infected bedding and clothing are removed by van to the Corporation Disinfecting Station in Argyll Road.

Cleansing of persons will be carried out at the above station.

Ambulance facilities are provided from the Isolation Hospital.

Venereal Disease.

Enquiries as to the existence of these diseases are made by the Port Sanitary Inspector. Leaflets and posters printed in English, Norwegian and Swedish are distributed and displayed. Treatment, free of cost, is provided at the Preston Royal Infirmary.

Bacteriological examinations are carried out at the Public Health Laboratory, Manchester, and at the Preston Royal Infirmary.

There were no cases of infectious disease landed from vessels, nor were any such cases reported to have occurred during the voyage.

5. Measures against Rodents.

Steps taken for detection of rat plague.

Enquiries are made by the Port Sanitary Inspector and the rat-catcher as to mortality among rats. Daily observation is made by the rat-catcher—a whole-time man, and any undue mortality reported to the Port Medical Officer who makes the necessary arrangements with the Laboratory of the Preston Royal Infirmary, for bacteriological examinations.

The passage of rats between ship and shore is prevented by rat guards placed on cables.

Ships are deratised mainly by dogs, ferrets and traps, in some instances supplemented by fumigation by means of sulphur dioxide.

Premises in the vicinity of ships are subject to daily poison baiting, lithographer's varnish, traps, and the work of dogs and ferrets.

A whole time rat-catcher keeps records of his kills, these records being inspected by the Port Medical Officer. 2,398 Rats were destroyed in the year, of which 50 rats were caught in traps on ships arriving from foreign ports, and 655 by dogs, ferrets and traps. The net total rats caught is 705.

Total baits set—6,412. Caught and taken by poison and varnish—1,693.

The major part of the ground floor space in the warehouses is constructed of concrete.

No action has been taken to extend rat-proofing of ships or on shore.

6. Food Inspection.

Public Health Imported Food Regulations, 1925.

Public Health Imported Milk Regulations, 1926.

Public Health Preservatives in Food Regulations, 1925-1927.

Merchandise Marks Act, 1926.

No food to which these regulations apply enters this port.

Public Health (Regulations as to Food) Act, 1907.

LIST OF IMPORTED ARTICLES INSPECTED.

Indian Corn, Wheat, Sugar, Potatoes.

LIST AND WEIGHT OF ARTICLES CONDEMNED AND DESTROYED.

Nil.

The Preston (Shell Fish) Regulations, 1923.

These regulations forbidding the picking of mussels for human food, in the estuary of the River Ribble, came into force in October, 1923. Since then placards have been posted in prominent places on both sides of the River and at Preston. The placards and notices were renewed during 1931. All the fishermen on both the north and south sides of the River and at Preston have been served with a copy of the notice. The mussel beds have been visited regularly by Inspector Henry S. Holden, who paid 14 visits to these beds during 1931. During the past year special precautions were taken regarding the inspection of cockles brought by the boats and conveyances from the Ribble beds, with a view to ascertaining the presence of mussels amongst them.

7. The Hygiene of Crew's Spaces.

In many of the vessels arriving in Preston the crew's spaces, particularly as regards air space, ventilation and lighting, are far from satisfactory. The Scandinavian ships on the other hand are as a rule well designed and form a marked contrast.

In my opinion, action by the Board of Trade with regard to crew's quarters is urgently needed.

APPENDIX
TO
SECTION III.

TABLE IIIA.

Amount of Shipping entering the Port Sanitary District during the Year 1931.

		Number	Tonnage	Number Inspected		Number reported to be defective	Number on which defects were remedied
				By the Med. Officer of Health	By the Sanitary Inspector		
Foreign	Steamers	191	202197	26	191	58	58
	*Motor	28	100135	13	24	...	...
	Sailing	...	...	...	...	...	...
Total Foreign		219	302332	39	215	58	58
Coastwise	Steamers	1170	198378	28	1081	212	200
	*Motor	34	11837	2	34	...	...
	†Sailing	51	1140	...	1	...	...
Total Coastwise		1255	211355	30	1116	212	200
Total Foreign and Coastwise		1474	513687	69	1331	270	258

*Includes mechanically-propelled vessels other than steamers.

† Includes entry and re-entry of sailing flats engaged on transport of pipes for Sewage lines.

TABLE IIIB.

Rats destroyed by dogs, traps and ferrets, and
number of Baits set for destruction of Rats in 1931.

Number of	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov	Dec.	Total In Year
Brown Rats	54	90	65	86	55	64	68	63	90	91	76	51	853
Black Rats	99	140	120	159	101	117	125	117	166	167	141	93	1545
											Total...		2398
No. of Baits set.	407	570	518	639	464	498	561	525	691	683	496	360	6412

TABLE IIIb.

Trade of Port.

The Chief Imports	Source	The Chief Exports	Destination
Wood Pulp	Canada, Germany, Sweden, Norway, and Finland	General	Dublin, Belfast and Baltic Ports
Timber	Canada, Norway, Russia, Roumania, Germany, Sweden, and Finland	Coal and Coke	Ireland and Baltic Ports
Stone	Norway, Wales, Scotland and Ireland	Machinery	Ireland
China Clay	Cornwall and Devon	Salt Cake	Baltic Ports
Potatoes	Ireland	Gas Retort Carbon	France
Live Stock	Dublin		
Esparto Grass	Oran and Azew		
Cement	London, Belgium and France		
General	Sweden, Belfast, Dublin, Germany, Norway and Finland		
Whiting	London and Cornwall		
Motor Spirit	London and Texas via Amsterdam and Black Sea		
Slates	Wales and Norway		
Roof Tiles	France		
Round Timber	Scotland & Ireland		
Grain	Belfast, Dublin and Liverpool		
Sugar	Hamburg		
Bog Ore	Antwerp		
Pitwood	Scotland		

IV.—Food.

A.—MILK SUPPLY.

Milk retailed in the Borough amounts approximately to 6,117 gallons daily, or eight ounces per head per day, compared with 6,067 gallons daily and eight ounces per head per day in 1930.

(a) PRODUCED DAILY IN THE BOROUGH :

7 Cowkeepers in the Borough produce	...	...	...	249 galls.
-------------------------------------	-----	-----	-----	------------

(b) RETAILED DAILY IN THE BOROUGH :

67 Dairymen in the Borough retail	...	...	...	1940	„
11 Resident Kitters in the Borough retail	...	...	...	242	„
37 "Mixed Business" Shops retail	...	...	...	665	„
7 Cowkeepers in the Borough retail	...	...	...	284*	„
108 Dairy Farmers outside the Borough retail	...	...	...	2758	„
51 Purveyors of bottled milk retail	...	...	...	72	„
12 Purveyors of "grade A" milk retail	...	...	...	155	„
1 Purveyor of "certified" milk retails	...	...	...	1	„

*One cowkeeper retails milk purchased outside the Borough in addition to own produce.

Cowkeepers in the Borough are producing daily one gallon more and retailing daily 24 gallons more than in the previous year. 152 cows are kept in the Borough.

Ninety-six per cent. of the milk consumed is produced outside the Borough.

The figures as to the amount of milk sold are based upon estimates provided by the traders concerned. They are approximate only.

The supervision of the milk supply has necessitated 34 visits to Dairies, Cowsheds and Milkshops by the Veterinary Officer and 130 visits by the Sanitary Inspectors.

1. Tuberculosis and the Milk Supply.

375 mixed samples of market milk have been taken during 1931. The reports furnished show 42 positive results—3 of these were taken from cows in the Borough, two of which were under suspicion. A brief analysis of the investigations by the County Authorities shows that of the remaining 39 positive samples (milk containing tubercle bacilli) in 21 cases no cause for the contamination was discovered. In 17 investigations 21 cows suffering from tuberculous udders were discovered, and in four of these investigations two cows were found affected on the same farm.

In six of the 39 investigations the visiting Veterinary Officer reports that clinically affected animals were found by him at the time of his visit. Compared with previous returns this year's figures are much higher. The percentage of negative results of investigations are much greater.

The increase in the number of market milk samples taken for biological examination combined with the greatly increased percentage of infected milks, indicates that our present methods of control are far from satisfactory. No doubt the improved technique of the bacteriologist may be responsible for some increase in that percentage, but nevertheless the disconcerting fact remains that more than 1/10th of the milk samples tested are found to contain the tubercle bacillus. As long as we are content to put up with tuberculosis in our dairy herds we must put up with infected milk. An effort to clear the dairy herds of this country from tuberculosis is required. This effort could be started on individual farms and extended to localities. A national scheme of control with up-to-date legislation in the marketing and classification of milk could be undertaken. In the meantime greater efforts will have to be made to see that only healthy animals are milked and that a uniform system of inspection of all dairy herds is instituted. A new classification of graded milks is needed. Greater encouragement should be given to farmers to test and free their herds from tuberculosis. Until the dangers of infected milk are considerably reduced by such methods all milk should be submitted to pasteurisation. This at the present time seems to be the only safeguard, and is being more strongly advocated by municipalities and in other countries.

2. Examination for the Approximate Amount of Butter Fat and Manurial Contamination.

Three hundred and seventy samples of milk were examined and 126 of these, or 34.0 per cent. compared with 47.9 per cent. last year, were found to be unsatisfactory, the majority owing to manurial contamination.

3. Bacterial Contamination.

A microscopical examination and count is made to ascertain the presence of the colon bacillus. 371 samples were examined during the year. 19 of these showed freedom from contamination. 47 were contaminated to a high degree.

Colon bacilli were found present in the following dilutions of a cubic centimetre :

Cols. 1	2	3	4
1 cc.	1/10 cc.	1/100 cc.	1/1000 cc.
80	126	99	47

The interpretation of the above statement indicates in cols. 1, 2 and 3 slight unavoidable contamination, and in col. 4 avoidable contamination.

There is a little improvement in the cleanliness of both the personnel and the vehicles delivering milk. The demand for bottled milk increases and although a percentage of this is "Grade A" milk, the greater part is ungraded.

B.—MEAT AND FOOD INSPECTION.

1. Retail Markets.

There are 15 meat stalls which sell meat on Saturdays only. These conform to the Meat Regulations with regard to cleanliness.

The major portion of the market consists of fruit and vegetable stalls, poultry, rabbits, cheese and fish, etc. These stalls are totally unprotected from contamination by dust, etc. The provision of a closed food market would be of great advantage to the Public Health. The quality of goods exposed for sale on this market on the whole is satisfactory. The Veterinary Officer paid 99 and the Food Inspector 248 visits of inspection.

There is a wholesale fish market daily in the early morning at the Fish Market, L.M.S. Railway Station, and retail sales daily in the covered market. The quality of the fish is satisfactory. The wholesale fish market is regularly supervised by Inspector Crossthwaite, 322 visits having been paid. The retail markets (1,290 visits) are also continuously examined.

3,946 tons of fish, etc., reached the fish markets, and 3 tons 8 cwt. were condemned.

The following food preparing premises were registered at the end of 1931 under Section 45 of the Preston Corporation Act, 1921 :—

Cooked Meat Manufacturers	...	...	...	...	162
Sausage and Meat Pie Manufacturers	...	...	...	...	10
Tripe Dressers	...	...	...	...	9

254 visits of inspection were paid by the District Sanitary Inspectors during the year, and 45 by the Veterinary Officer.

In addition to the visits paid to slaughter houses, the following premises where food is sold were regularly visited :—

	Premises	Visits
Beef and pork butchers	164	1230
Fried fish shops	159	131
Other premises	35	88

At the beginning of the year there was 158 fish fryers on the register. During the year, the Council gave consent for the establishment of an additional fish fryer. All these places are under regular supervision (131 visits paid by the inspectors). In eight instances, fish frying is carried out by means of electricity.

2. Slaughterhouses (Private).

The number has been reduced by one to 11, and with the exception of one used solely for pig-killing and another larger slaughterhouse, all are small premises used by retail butchers. These premises conform with the sanitary requirements of the Meat Regulations, 1924, and the requirements of the annual licensing to which they are subject.

The Veterinary Surgeon and the Meat Inspector have paid 4,153 visits in connection with meat and food inspection.

3. Public Abattoirs.

There is little change in the conditions existing at these premises. For several years, the lack of canteen and washing accommodation has been mentioned in the Annual Report, but so far no suitable arrangements have yet been made to provide such. If the cleanliness of the slaughtermen is to be secured, it is essential to provide reasonable accommodation. Electric light and an increased water supply are also urgent requirements: both would promote the efficiency of the slaughtermen and market servants in their work. In particular a good light is an essential for the efficient inspection of meat.

In last year's report a table was given showing the amount of meat and offals sent into the Borough from animals slaughtered outside the Borough. It was then pointed out that there was a tendency for butchers to import this meat in increasing quantity. It is recognised that a proportion of fresh meat has always been admitted from wholesale traders in other centres, but until a universal system of inspection and marking is adopted, it will be necessary to inspect these supplies on arrival.

The inspection of this meat necessitated 272 visits.

An analysis of the number of all animals slaughtered and inspected in the Borough during the year shows a slight decrease in the number of cattle and sheep. There is an increase in the number of pigs killed in the Borough and a larger increase in the number of pigs killed in outlying districts and brought in for inspection. The increase in the number of calves is no doubt due to the killing of a number for other towns owing to the operation of a Foot-and Mouth Disease Standstill Order.

Table IVB, dealing with the causes of condemnation, shows an increased number of livers taken for Distomatosis in sheep. There is a decrease of tuberculous meat in calves. This latter has a definite relationship to the milk supply as the infection is conveyed through milk.

Public Health (Meat) Regulations.

There have been no prosecutions under these Regulations during the year. 107 visits were paid to shops and other food premises under the above Regulations by the Meat Inspector, a complete record of the sanitary condition of each premises is kept.

Sale of Food Order, 1921 (Labelling of Imported Meat).

In addition to visits to shops under the Meat Regulations mentioned above, close attention is paid by the Meat Inspector to see that the shops conform to the labelling order.

C—DISEASES OF ANIMALS ACTS, 1894-1927.

In administering the Diseases of Animals Acts, all live-stock entering the Cattle Market and Saleyard are inspected (216 visits). In addition, visits (121) are frequently paid to all farms situated in the Borough, and also piggeries.

Anthrax.

One suspected case in a horse was investigated. The history and post-mortem examination were distinctly suggestive of anthrax infection. Micro-

scopic examination was inconclusive, and only after a prolonged bacteriological investigation was the case proved negative. In the meantime, the carcass was destroyed and disinfection was carried out on premises concerned. Microscopic examination of the blood of several other suspected animals was made during the year with negative results.

Foot and Mouth Disease.

There have been no outbreaks of this disease in the Borough. On March 9th disease was confirmed at Stafford (30 animals in contact and infected were destroyed). On June 17th, two Irish heifers were reported with disease from Farleton, near Kendal. Disease spread through movements of animals, and Pilling, Myerscough, and finally Plungington Hotel, Fulwood, became "infected places." The Market was closed in consequence of this proximity to infected premises, and a Standstill Order was enforced throughout Great Britain, with further restrictions in the "Infected Areas." The landing of Irish Animals except for slaughter within landing place was also prohibited. On account of the probability of infected stock having passed through the Market, a rigorous cleansing and disinfection was carried out throughout these premises. The Cattle Market was opened again on July 14th.

Parasitic Mange.

One suspected case reported, involving one animal. Investigation and microscopical examination confirmed the presence of acari. The Parasitic Mange Order was put into operation, and in due course and after efficient cleansing and disinfection of premises, all restrictions imposed by the Order were withdrawn.

Sheep Scab.

One suspected case in one animal exposed for sale at the Auction Market. The animal was destroyed and the skin was burnt. Microscopical examination of skin scrapings was unsuccessful in demonstrating the parasites, as owing to treatment the skin lesions had partially healed.

Tuberculosis (Cattle) Order, 1925.

As a result of routine inspection of the dairy herds in the Borough, two animals were removed and slaughtered under this Order.

At the Cattle Market and Saleyard, routine inspection of all cattle necessitated the removal of nine animals, all of which were slaughtered under Article 12 of this Order.

Under Article 5, fifty-two animals have been sent in by surrounding Local Authorities for slaughter under Form D. The responsibility of examining the carcasses of all these animals for food purposes rests with this Authority. The details of inspection of these carcasses are included in Table IVc.

Local Authorities are also notified if animals from their districts which are slaughtered for food purposes are found on post-mortem to be extensively diseased. This notification gives Local Authorities the opportunity of visiting the farms from which diseased stock have come, and allows them to investigate the milk supply at such places.

Epizootic Abortion (Cattle).

During the year, there was no evidence of any contravention of the Order. Although this disease is prevalent, the spread of infection from diseased to healthy animals at the Market is largely prevented by reason of the efficient cleansing and disinfection of the lairs, etc., and the vehicles conveying animals to the Market. The disease is, however, spread from farm to farm through buying an infected animal which may or may not have been exposed for sale in a public market. The constant interchange of livestock is the greatest of all difficulties in the prevention of spread of bovine diseases generally, and this disease in particular.

Of the remaining scheduled diseases under the Diseases of Animals Acts, viz. : — Cattle Plague, Epizootic Lymphangitis, Glanders and Farcy, Rabies, Pleuro-Pneumonia, Sheep Pox, there have been no outbreaks during the past year in Great Britain.

New Orders relating to diseases of animals have been issued during the year.

Cleansing and Inspection of Live-stock Markets.

Under the Market Sales and Lairs Order, 1925, Animal Transit and General (Amendment) Order, and the Transit of Animals Order, powers are given to the Local Authority to enforce the cleansing and disinfection of all vehicles plying for hire and carrying live-stock, also the efficient cleansing and disinfection of the Market, railway sidings, etc.; in addition to the keeping in a proper state of repair of such premises. A report has been rendered with regard to repairs found necessary at the Cattle Market, and this is receiving attention.

During the past year, repairs have been carried out on the pavement of certain parts of the Cattle Market. The existing water supply is inadequate.

The Transit of Animals (Amendment) Order, 1931, which changes the constructional requirements of vehicles, but postpones the date for such to be completed, has been served on the drivers of 20 motor floats. One case was reported for prosecution; defendant was fined 20s. and 20s. costs.

Importation of Live-stock from Ireland, under the Animals (Landing from Ireland, etc.) Order, 1923.

There was a temporary stoppage of importation due to Foot and Mouth disease restrictions for a month during the year.

The figures show a considerable decrease in the number of fat cattle and and fat pigs imported and is largely due to the temporary prohibition of importation as stated above. The inspection of all imported live-stock is carried out by an official of the Ministry of Agriculture. All animals suffering casualties are slaughtered if unfit to travel, and such carcasses are all inspected by this department before being permitted to be removed for food purposes. The number of such casualties for 1931 are : 11 cattle, 99 sheep, and one pig. Most of these were slaughtered for accidental injuries. All condemnations are included in the general tables.

Various portions of the Cattle Market have been authorised for the reception of Irish animals. As the trade in Irish animals has continued to increase the available accommodation for such animals has had to be extended from time to time, and in order to comply with the requirements of the Order, a re-arrangement is now under consideration with a view to concentrating this accommodation. This Order is framed in order to prevent contact of English and Irish animals in an open market, and in this Market where no special buildings can be provided for the use of Irish animals only, special difficulty is experienced.

Protection of Animals Act, 1911.

This Act gives powers to prevent, and if necessary take proceedings against, any person causing cruelty to animals. The Knacker's Yard and Live-stock Markets are visited in this respect. The bringing into the Public Market of weak or crippled calves and pigs, and the over-stocking of dairy cattle prior to sale, are offences. Frequent warnings have been given, and such animals removed and slaughtered without undue detention and exposure.

Poultry Act, 1911.

The Conveyance of Live Poultry Order, 1919, made under the above Act, provides for :—

- (1) Protection of live poultry from unnecessary suffering when travelling or exposed for sale.
- (2) The cleansing and disinfection of receptacles and vehicles.

The markets where live poultry are exposed for sale are visited. One dealer's premises were visited to investigate a charge of neglect and cruelty which could not be sustained.

D.—FOOD AND DRUGS (ADULTERATION) ACT, 1928.

Four hundred and thirteen samples of various foods and drugs were submitted for analysis; 25 or 6.0 per cent. were adulterated, compared with 7.6 per cent. in 1930 and 5.1 per cent. in 1929. Of the samples taken 406 were informal, and seven were formal samples.

1. Milk.

137 informal samples were taken under the Food and Drugs Acts, of which 134 were genuine. The Public Analyst reported on the remaining three that two of them contained nine per cent. and six per cent. of added water respectively, and the other had been deprived of 16 per cent. of its milk fat. Formal samples of two of these were obtained; the first was found to contain six per cent. of added water, and a cautionary letter was sent by the Town Clerk. The second formal sample was found to be genuine.

2. Spirituous Liquors.

Forty-four informal samples of whisky, brandy, rum and gin were taken, and in three instances there was found to be an excess of water, viz. :—1.2 per cent., 2.5 per cent., and 4.0 per cent. No formal samples were taken.

3. **Wrapped Cheese.**

Nine informal samples were taken, six of which contained tin varying from 20 to 360 parts per million parts of the samples. The remaining three samples were genuine.

4. **Tinned Beans.**

One informal sample was taken and found to contain 250 parts of tin per million parts of the sample.

5. **Bacon.**

Eight informal samples were taken, one of which contained 330 parts of Borates, calculated as Boracic Acid, per million parts of the sample. A formal sample was taken and found to be genuine.

6. **Cream.**

Six informal samples were taken, three of which were found to consist of artificial cream, and contained 69.3 per cent., 69.3 per cent. and 70.8 per cent. of Fat respectively. Two formal samples were taken and found to be genuine.

7. **Butter.**

Seven informal samples were taken, two of which were found to contain the foreign ingredient as under :— 20 per cent. fats other than butter fat, and one sample contained 5.6 per cent. excess of water. Two formal samples were taken and found to be genuine.

8. **Sausage.**

Nine informal samples were taken, two of which were deficient in meat to the extent of 12 per cent. and 28 per cent. respectively : a cautionary letter was sent by the Medical Officer of Health to the makers in each case. Two further samples contained 190 and 180 parts, respectively, of sulphur dioxide per million parts of the sample.

9. **Sulphur Ointment.**

One informal sample was taken and found to contain 70 per cent. excess of sulphur.

10. **Additional Informal Samples.**

No adulteration was detected in 184 other samples, comprising 128 different articles of food, three articles of drink, and 22 articles of drugs.

11. **Vinegar.**

The methods of manufacture were fully described in the report for 1930.

12. **Ice Cream.**

Number of persons selling Ice cream ...	...	180
---	-----	-----

Number of persons manufacturing Ice cream ...	...	157
---	-----	-----

Ice Cream is manufactured in varying quantities of from half-a-gallon to 120 gallons weekly during the summer season, the approximate weekly total

being 1,013 gallons; the usual ingredients are milk, eggs, and sugar. 219 visits were made by the Inspectors.

This subject was dealt with in greater detail in last year's report.

13 Margarine.

Since 1900, 35 firms have been entered in the register; of these 21 are still in business.

E.—ACTION TAKEN UNDER OTHER ACTS.

1. Fertilisers and Feeding Stuffs Act, 1926.

Forty-one samples of fertilisers, and 60 samples of feeding stuffs were submitted for analysis during the year. 19 and 37 respectively were correct, 21 and 23 incorrect.

These figures (56 per cent. correct) are compared with 57.5 per cent. and 40.1 per cent. correct in 1930 and 1929 respectively.

Of the 44 incorrect samples, in five instances no statutory statement was given. Two statutory statements were not in the prescribed form, and one sample differed to the disadvantage of the purchaser from the statutory statement. In respect of the remaining 36 incorrect samples the limit of variation prescribed in the Act had been slightly exceeded.

The reasons for the variation are the numerous sources and methods of manufacture without the check of frequent chemical analysis.

Our work in sampling and analysis has enabled us to bring before vendors, and through them, the manufacturers, the importance of the accuracy of the statutory statement. Since the coming of the Act into force no request has been made by a purchaser for the taking of a formal sample. Copies of an enclosure to C.C. 7063 advising purchasers of their rights re testing warranties were sent to farmers residing within the Borough in accordance with Circular Letter C.C. 7063, dated April 20th, 1931.

APPENDIX TO SECTION IV.

TABLE IVA.

Number of Animals Slaughtered and Inspected with increase or decrease as compared with 1930.

	Cattle		Sheep		Pigs		Calves	
	Killed	Inspd.	Killed	Inspd.	Killed	Inspd.	Killed	Inspd.
Public Abattoir ...	3791 -202	3811 -204	*25650 +431	*25752 +423	3562 +348	4100 +247	927 +169	909 +133
Private Slaughter-houses	2938 -310	2950 -304	16866 -1176	13975 -897	2971 +777	7376 +1239	284 -62	284 -63
Totals ...	6729 -512	6761 -508	*42516 -745	*39727 -474	6533 +1125	11476 +1486	1211 +107	1193 +70

* Includes one Goat.

TABLE IVB.

Causes of Condemnation in detail.

The weight (lbs.) of meat condemned, the cause of condemnation,
and the class of animal.

Disease	Cattle	Sheep	Pigs	Calves
Tuberculosis	148478	...	20118	365
Distomatosis	19034	1879	...	...
Mammitis (Septic)... ..	6150	38	365	...
Mastitis (Non-Septic)	1770	...	9	...
Fevered (incl. Physicked)	12352	113	785	60
Metritis (Septic)	6155	610	...	...
Actinomycosis	916	5	...	...
Parasitic Cysts	878	506	399	...
Dropsy and Emaciation	18908	*2246	991	439
Cirrhosis of Liver	404	44	737	12
Abscess	1210	11	64	27
Fatty Degeneration and Infiltration	381	52	...	...
Angioma of Liver	405	...	...	...
Pyæmia and Umbilical Pyæmia	550	...	410	169
Septicæmia	3040	...	214	301
Pneumonia (Septic)	1600	...	263	40
Pericarditis (Septic)	1215	...	40	...
Peritonitis	2594	5	289	...
Pneumonia, Pleurisy and Pericarditis	1383	112	654	76
Emphysema	74	...	...	...
Oedema	134	...	25	...
Nephritis	41	...	31	...
Congestion	457	62	85	7
Malignant Neoplasms	500	...	...	...
Johne's Disease	880	...	...	...
Asphyxia	730	381	295	...
Necrosis	6	...	113	...
Bruising and Fractures	4693	219	551	200
Decomposition (incl. Bone Taint)	429	1158	915	355
Moribund	...	1692	725	125
Immaturity	...	...	...	2948
Jaundice	...	...	456	...
Arthritis and Septic Arthritis	1729	...	610	...
Swine Erysipelas	...	...	1145	...
Swine Fever	...	...	240	...
General Anæmia	...	200	...	...
Miescher's Disease... ..	...	...	400	...
Enteritis	400	...	...	...
Osteoma	120	...	...	...
Urticaria	...	...	22	...
Uraemia	450	...	...	...
Bacillary Necrosis	14	...	...	...
Lymphadenitis	...	35	...	...
Contaminated	15	...	17	...
Totals (lbs.)	238105	9368	30968	5124

* Includes one goat.

TABLE IVc.

Number of Animals inspected at Cattle Market and Saleyards.

			Cattle	Sheep	Pigs	Calves	Horses	Totals
1931	...	...	43342	105525	39856	10574	1286	200583
1930	...	...	50359	114886	27613	13287	1011	207156
1929	...	...	45992	110579	38793	12714	1594	209672
Other Premises—								
1931	...	...	692	.....	335	.....	96	1123
1930	...	...	411	.....	90	.....	30	531
1929	...	...	492	.....	51	.....	35	578
Totals—								
1931	...	...	44034	105525	40191	10574	1382	201706
1930	...	...	50770	114886	27703	13287	1041	207687
1929	...	...	46484	110579	38844	12714	1629	210250
Increase or decrease								
1931 on 1930	...	...	-6736	-9361	+12488	-2713	+341	-5981

TABLE IVd.

Animals dealt with under the Tuberculosis (in Animals) Order, 1925.

Tuberculous Animals.	No.	Giving T.B. Milk.	Suffering from		Chronic Cough and showing definite signs of T-B.
			T.B. Udder	T.B. Em- aciation.	
Sent in by Local Author- ities 	52	11	30	...	11
Removed from Cattle Mart	9	...	3	4	2

V.—Prevalence of, and Control Over, Infectious Diseases.

A.—GENERAL.

In the following paragraphs are discussed the principal infectious diseases, their incidence, their effect upon mortality and the means taken for preventing as far as possible serious outbreaks among the community.

The decline in Diphtheria noted in recent years has continued throughout the year under review. Scarlet fever which was present in epidemic form in 1928 was notified on even fewer occasions than in 1930. Enteric fever was notified on nine occasions. Influenza was present in epidemic form in the early part of the year, causing 82 deaths, as against 13 in 1930. There was a large increase in the prevalence of pneumonia, 155 deaths being recorded from this cause, as against 85 in the previous year. There was a decrease in the number of cases of erysipelas notified. Chicken pox, still prevailing in epidemic form, was notified on 422 occasions. The epidemic of measles prevalent in 1929 died out in the spring of 1930, but reappeared in the autumn of 1931.

1. Diphtheria.

	1931	1930	1929	1928	1927
No. of cases notified	64	152	130	158	223
No. of deaths	4	7	4	9	11
Case incidence per 1,000 population	0.53	1.20	1.03	1.243	1.75
Mortality per 1,000 population ...	0.033	0.056	0.032	0.07	0.087
Mortality per cent. of cases notified	6.25	4.61	3.08	5.70	4.93

The number of cases of diphtheria notified was considerably less than in 1930, itself a year of low prevalence, and caused four deaths. The disease was evenly distributed both as to wards and the time of year. Over 89 per cent. of the cases were removed to the Isolation Hospital, in which institution occurred three of the four total deaths.

Issues of Diphtheria Antitoxin.

				Size of dose.	
				4,000 units.	8,000 units.
Health Office, Tithebarn Street	..	...	...	24	19
Preston Royal Infirmary	...	...	...	24	...
Central Police Station	...	...	...	24	...
Water Lane Police Station...	...	...	...	12	...
New Hall Lane Police Station	...	...	...	12	...
Isolation Hospital	...	...	...	12	36
Total doses				108	55

2. Scarlet Fever.

	1931	1930	1929	1928	1927
No. of cases notified	175	206	232	662	109
No. of deaths	1	1	2	3	...
Case incidence per 1,000 population	1.44	1.63	1.84	5.208	0.80
Mortality per 1,000 population ...	0.008	0.008	0.016	0.02	...
Mortality per cent. of cases notified	0.57	0.49	0.86	0.45	...

Scarlet fever, which was prevailing in epidemic form during the years 1925 and 1928 has been of comparatively slight significance in the last three years. The disease was most prevalent in the last four months of the year and was generally distributed. Eighty-three per cent. of the cases were removed to the Isolation Hospital where the one death occurred.

3. Enteric Fever.

	1931	1930	1929	1928	1927
No. of cases notified	9	2	1	5	2
No. of deaths	1	1	1	1	1
Case incidence per 1,000 population	0.075	0.016	0.008	0.04	0.016
Mortality per 1,000 population ...	0.008	0.008	0.008	0.008	0.008
Mortality per cent. of cases notified	1.11	50.0	100	20.00	50.00

There were nine original notifications of which seven were withdrawn in the absence of confirmatory signs. All nine were treated at the Isolation Hospital, in which institution there was one death due to generalised tuberculosis, the ultimate diagnosis.

4. Erysipelas.

Erysipelas was notified on 49 occasions. Twenty-two cases were treated in the Isolation Hospital. There were three deaths.

5. Pneumonia.

The incidence of Pneumonia depends very largely upon the presence or absence of influenza. In 1930 influenza was absent, but in February, 1931, it appeared in epidemic form. As previously commented upon, notification of primary and influenzal pneumonia is very indifferently carried out. There were 190 cases of the former, and 26 of the latter made, whereas the deaths from these causes amounted to 155 and 82 respectively. The majority of the deaths occurred in the winter months. A comparison with 1930 is appended.

1930.			1931	
	Notification.	Deaths.	Notification.	Deaths.
Primary Pneumonia ...	110	85	190	155
Influenzal Pneumonia ...	4	13	26	82

6. Encephalitis Lethargica.

No new cases of this disease were notified during the year. Three deaths occurred. Two of them were old standing cases, and the remaining one was not notified. A recent enquiry into cases notified since 1923 has been carried out by Dr. Keays, Assistant School Medical Officer. Since 1923 64 cases of the disease have been brought to the notice of the Health Department. Of these 34 cases have been notified by medical practitioners, and the remainder brought to light by registration as causes of death, or have been discovered in the Fulwood Institution and in Asylums for the insane.

Thirty cases are known to have died, four cannot be traced. Of the remaining 30 cases now living, the post encephalitic changes, mental and physical, are so slight in a few as to throw doubt on the original diagnosis. Alternatively they have made a better recovery than the nature of the disease leads one to anticipate. These are counter-balanced by definite cases which

have not been notified, or whose mental and physical degeneration has been ascribed to some other cause. A summary of the social condition of the 30 cases now living is as follows. Four are certified as persons of unsound mind. Eight persons are in the Preston Institution, ten persons now living at home would be better under institutional care. Two persons are able to perform light work, and six are able to work at their own occupation, industrial or domestic.

7. Acute Anterior Poliomyelitis.

No new cases of acute poliomyelitis (infantile paralysis) were notified.

8. Infective Enteritis.

Notification of infective enteritis is even less complete than that of primary and influenzal pneumonia. Five notifications only were received, and nine children under two years of age died of the disease.

9. Chicken Pox.

Chicken Pox was very much less prevalent than in 1929. The epidemic, which began in October, 1927, and continued throughout 1928 and 1929, produced a monthly average of about 50 cases up to the end of July, 1930, after which there was a considerable fall. There was a further recrudescence in the first half of 1931 and again in the winter of the year.

The disease was widely spread, mild in form and caused no mortality.

10. Measles.

The epidemic of measles in 1929, producing over 3,000 cases, was continued during the first quarter of 1930, 1,242 cases being notified. A further epidemic began in the winter months of 1931 and continued through the spring of 1932. 1,169 cases were notified during the year.

11. Small Pox.

There were no cases. In one instance a person reached Preston from overseas in whose case small pox had arisen on the boat during the voyage home. He had been vaccinated as a contact, and remained in good health.

Tables relating to vaccination appear in the Appendix to this Section.

12. Whooping Cough.

A smart epidemic of whooping cough beginning in the spring continued during the summer and died down in the winter. 273 cases came to the notice of the Department of which eight died.

B.—ISOLATION HOSPITAL.

1. Three hundred and twenty-five cases were admitted as compared with 374, 459, 702, 465 and 360 in previous years. Fifteen patients died, of whom three died of Diphtheria, three of Erysipelas, and four from "Other diseases."

2. Enteric Fever.

Nine cases were admitted as compared with five and one in the previous two years. Five cases presented the clinical and bacteriological signs of the disease, and made good recoveries. Two cases proved to be severe attacks of gastritis influenza and recovered. In one case there were on arrival no signs of disease, and the fatal case, one of acute generalised tuberculosis, proved on a post-mortem examination, to have died of that disease.

3. Scarlet Fever.

One hundred and forty-five cases were admitted compared with 180, 210, 546, 85 and 98 in previous years. The one death which occurred in this group was not ascribed to scarlet fever, the patient being admitted for observation, and dying of heart failure due to chronic mental disease. The type of disease was mild. The length of stay for some years has averaged 31 days. Two cases on return home gave rise to subsequent cases. In the first instance the secondary case arose 17 days after return of the primary case, and in the second instance cases arose on the 17th, 26th, 29th and 30th day after return of the primary case. The five cases represent 3.57 per cent. of the 140 primary cases admitted, compared with 1.77, 2.44 and 3.02 in previous years.

4. Diphtheria.

Sixty-five cases were admitted compared with 145, 108, 224, 198 and 177 in previous years. There were three deaths, all of which occurred on the day of admission. One was due to Broncho-pneumonia in a late case of diphtheria. One due to advanced diphtheria itself, and one, in an elderly man, on post-mortem, proved to be due to a throat complication arising in a case of pernicious anæmia. Tracheotomy was performed on four cases, all recovered.

5. Measles.

Twenty-six cases were admitted as compared with 5, 69, 2, 66, 4 and 13 in previous years. One death occurred due to Broncho-pneumonia following Measles. Our experience is that children re-act quickly to good nursing and good ventilation. The Hospital has a large field of usefulness in the treatment of this disease.

6. Erysipelas.

Twenty-two cases of erysipelas and of septic conditions of the tissues following injuries or other diseases were admitted. There were three deaths, one of which was subject to Coroner's Inquest as resulting from an injury, and one due to erysipelas as a terminal event in the case of a patient suffering from tuberculosis of the kidney.

7. Pneumonia.

Seven cases were admitted, among which occurred two deaths. One of these, a child, died of pneumonia following whooping cough.

8. Puerperal Fever.

No cases were admitted during the year.

9. Other Diseases.

Fifty-one cases were admitted in this miscellaneous group as compared with 15 last year. They were classified as follows :—

Marasmus	15	Mumps	3
Ophthalmia Neonatorum ...	6	Bronchitis	2
Whooping Cough	5	Dermatitis	2
Dysentery	4	Meningitis	1
Scabies	4	Influenza	1
Chicken Pox	3	Tuberculous Glands ...	1
Impetigo	3	Epidemic Diarrhœa ...	1

Four deaths occurred. Two from marasmus, one from meningitis, and one from influenza.

C.—TUBERCULOSIS.

1. Incidence and Mortality of the Disease.

In the year under review the total number of cases of tuberculosis (all forms) notified in Preston was 217 (primary notifications on Forms A and B).

Of these 133 were pulmonary and 84 non-pulmonary cases. These figures shew a decrease from the previous year when 247 notifications were received.

The above figures give a notification rate of 1.80 per 1,000 of the population for all forms of the disease. Of this rate the pulmonary form of the disease is responsible for 1.11, and the non-pulmonary form for .69 per 1,000 of the population.

The above rates indicate a slight decrease in the incidence of the disease when compared with the figures shewn in the previous year's Annual Report. It should be noted, however, that the population figure for the year under review, which is based on the last census returns, is considerably less than that from which the previous year's statistics were compiled—therefore the actual decrease in incidence is really greater than is apparent from the above rates. This decrease in the incidence is not confined specially to any one form of the disease; both forms of the disease (pulmonary and non-pulmonary) reveal an almost equal rate of decline.

The age and sex distribution of the notified cases (primary notifications on Forms A and B), the relative incidence in the different wards of the Borough, and the occupations of the notified cases will be found in Tables VA, VB and VJ respectively.

During 1931 the number of deaths registered in Preston as due to tuberculosis (all forms) was 103. Of the total deaths 82 were due to the pulmonary form of the disease, and 21 were caused by other forms of the disease.

The total is considerably less than the figure for the previous year when 125 deaths were recorded. It is also gratifying to record that it is the lowest figure ever recorded for the Borough, the previous lowest being in 1929 when 111 deaths were registered.

The death rate from the disease (all forms) was .85 per 1,000 of the population. The pulmonary form was responsible for a death rate of .68 per 1,000, while the other forms of the disease caused a rate of .17 per 1,000 of the population.

All the above death-rates are the lowest respectively recorded for the Borough, the previous lowest being in 1929, when the total death rate from all forms of the disease was .88 per 1,000 of the population. As in the case of the incidence the diminution affects both forms of the disease equally.

The ratio of the non-notified deaths to the total deaths from tuberculosis was as one to six.

The age and sex distribution of the deaths from tuberculosis is shewn in Table ID.

The above figures are again a source of modified gratification, and continue to bear testimony to the conquest of the disease which is slowly but definitely being achieved chiefly through the agency of anti-tuberculosis schemes.

2. Work done during the year.

The following is a summary of the work carried out during the year under the Dispensary Organisation :—

(a) At the Dispensary.

During the year 473 new patients were examined by the Tuberculosis Officer, either at the Dispensary or at their own homes.

Old patients made 1,805 attendances at the Dispensary for treatment, reports, or observation purposes.

Of the new patients 202 were diagnosed as suffering definitely from Tuberculosis in some form or other, 121 from pulmonary, and 81 from non-pulmonary Tuberculosis.

The pulmonary cases were classified as follows :—

T.B.—	...	...	...	...	...	...	...	53
T.B. Group 1	...	...	...	...	...	...	...	18
T.B. Group 2	...	...	...	...	...	...	...	39
T.B. Group 3	...	...	...	...	...	...	...	11
								121

The non-pulmonary cases were classified as follows :

Bones and Joints	...	...	...	...	...	...	19
Abdominal	...	...	...	...	...	...	15
Peripheral Glands	...	...	...	...	...	...	43
Other Organs	...	...	...	...	...	...	4
							—
							81

The nurses made 161 visits to the homes of new patients and 1,558 re-visits to those of old patients.

At the beginning of the year (in January) the Department sustained a serious loss through the death of Miss Mary Cole, who had been Tuberculosis Nurse for the past ten years. The vacancy has not been filled, and consequently the work of visiting, etc., has been carried out by one nurse for practically the whole of the year.

Table V_K shows in detail as required by the Ministry of Health the work at the Dispensary. This table explains itself and requires little comment except to say that the addition of the figures in Section D gives a total of 677 cases actually on the Dispensary register at the end of the year. Of these 677 patients 228 were arrested cases (152 pulmonary and 76 non-pulmonary). This means that these "arrested" cases have not shown any signs of active tuberculous disease for a period of at least two years, and that therefore there is a very good prospect of permanent cure.

Each year also a considerable number of cases in whom the disease has remained "arrested" for a further period of three years are written off the Dispensary register as cured.

(b) The Chestnuts Sanatorium.

There are no special developments to report in connection with this Institution during the year under review.

The occupational therapy scheme has continued to operate throughout the greater part of the year, and has been greatly appreciated by the comparatively small number of patients who have been well enough to take part in it.

The Sanatorium again owes a debt of gratitude to the numerous friends who have so kindly given their services in providing entertainment for the patients during the winter months.

An analysis of the cases dealt with at the Institution during the year is shown in Tables V_H and V_I. These deal with the numbers admitted and discharged during the year, their average length of stay and the average beds occupied daily.

(c) Residential Treatment.

The average number of beds available to the Corporation during 1931 for the treatment of all forms of tuberculosis, the extent of residential treatment and the immediate results of such treatment are shewn in Tables Vr, Vg and VL respectively.

Public Health (Prevention of Tuberculosis) Regulations, 1925.

There was no known instance during the year in which a tuberculous person was engaged in the milk trade.

Public Health Act, 1925. Section 62.

There was no instance in which the Council applied for an order for compulsory removal to hospital of a tuberculous person.

D—VENEREAL DISEASE.

The details of the cases presenting themselves at the centre are given in the Appendix. There has been a marked decrease in new cases (28%). This decrease is most marked in Gonorrhœa (22%) as against a decrease of 6% in Syphilis. With regard to the former condition, the number of men seeking an interview with the Doctor has increased by 1,348, whereas the number of women has decreased by 312. Intermediate treatments, that is treatment by an orderly or by a nurse, have increased by 1,123 in the case of males, and decreased by 387 in the case of females.

With regard to Syphilis, there is practically no change in the number of men suffering from this disease and seeking an interview with the Medical Officer, but the number of women so doing has increased by 523.

The number of men who have ceased to attend the clinic before completion of the full course of treatment, that is to say as soon as the more alarming symptoms have disappeared, is 123 as against 61. The corresponding number of women is 59 as against 39.

Conditions other than Venereal Disease have decreased by nearly two-thirds, but the total attendances at the clinic for all reasons have increased by over 2,000. The figures indicate that there is a slight falling off of cases of Syphilis presenting themselves to the centre, with a substantial increase in the number of attendances made. There is a large decrease in the number of new cases of Gonorrhœa, with a proportionately greater increase in the number of attendances.

TABLE VA.—Cases of Infectious Diseases for the Year 1931 classified according to age and sex.

Notifiable Disease.	Under 1 year		1—2		2—3		3—4		4—5		5—10		10—15		15—20		20—25		25—45		45—65		65 and over		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Diphtheria	1	1	1	2	...	1	...	5	2	12	10	6	5	1	3	1	...	...	6	1	1	...	...	33	31	
Erysipelas	1	...	...	...	...	...	...	...	...	...	...	2	...	1	1	...	...	8	7	9	15	4	22	27		
Scarlet Fever	1	...	...	3	2	3	5	8	5	41	42	17	21	2	6	1	5	1	5	1	1	...	76	99		
Enteric Fever	...	...	...	...	...	...	...	...	...	2	...	...	...	1	...	2	1	...	2	...	1	...	5	4		
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	8	...	...	...	...	10		
Pyrexia (Puerperal)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	6	...	25	...	...	...	...	36		
Ophthalmia Neonatorum	3	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	4		
Pulmonary Tuberculosis	1	...	...	...	...	...	...	...	2	1	2	...	1	5	7	20	9	14	26	28	8	7	2	58	75	
Other Forms of Tuberculosis	...	2	4	1	3	...	3	2	1	10	4	11	9	4	7	...	3	...	6	9	2	2	...	44	40	
Influenzal Pneumonia	1	1	1	...	...	1	2	...	...	...	1	...	...	1	2	1	...	4	5	3	2	1	...	14	12	
Primary Pneumonia	8	9	3	10	6	3	12	3	4	3	14	11	6	4	3	6	4	26	12	14	10	1	7	111	79	
Malaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...		
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Cerebro Spinal Fever	...	1	1	1	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	1	4	3		
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Infective Enteritis	1	1	1	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	3		
Chicken Pox	1	2	5	9	8	9	8	8	37	30	128	134	21	16	1	3	1	...	1	...	...	...	211	211		
Measles	14	21	28	39	50	56	71	77	161	143	275	206	9	9	2	...	3	3	1	1	...	...	614	555		
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Whooping Cough (not notifiable)...	4	11	8	8	2	13	16	17	29	32	59	73	...	1	...	...	...	...	...	...	...	...	118	155		

TABLE V B.

Cases of Infectious Disease notified in 1931 and classified according to Ward Distribution.

Notifiable Disease.	Total	St. John's.	Avenham.	Christ Church	Ashton.	Maudland.	St. Peter's.	Moorbrook.	Park.	Trinity.	Deepdale.	Ribbleton.	Fishwick.
Diphtheria	64	8	3	2	5	10	3	6	7	5	4	7	4
Erysipelas	49	4	1	4	3	3	6	...	4	3	9	8	4
Scarlet Fever	175	24	9	7	15	15	13	9	15	14	20	16	18
Enteric Fever	9	2	...	1	...	2	...	...	1	1	2	...	...
Puerperal Fever	10	1	...	...	1	...	...	3	1	1	1	1	1
Pyrexia (Puerperal)	36	1	3	...	1	1	1	1	26	...	...	1	1
Ophthalmia Neonatorum	7	1	...	...	...	3	...	...	...	1	1	...	1
Pulmonary Tuberculosis	133	13	9	11	5	8	13	7	14	9	14	20	10
Other Forms of Tuberculosis	84	9	7	10	4	6	6	4	8	7	6	9	8
Influenzal Pneumonia	26	2	...	...	4	1	5	3	1	...	2	4	4
Primary Pneumonia	190	18	4	19	11	6	14	8	22	24	32	15	17
Malaria	1	1	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro Spinal Fever	7	1	...	...	1	1	2	1	1	...	...	...	...
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Infective Enteritis	5	1	...	...	...	...	...	...	...	...	2	2	...
Chicken Pox	422	47	48	10	7	17	32	28	11	18	57	80	67
Measles	1169	107	35	43	39	52	51	18	121	143	209	198	153
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough (not notifiable)...	273	...	...	33	38	47	25	12	28	13	36	27	14

TABLE Vc.

Cases of Infectious Disease notified in 1931 and classified according to month of occurrence.

Notifiable Disease.	TOTAL	January	February	March	April	May	June	July	August	September	October	November	December
Diphtheria	64	15	9	4	3	3	3	3	8	4	4	4	4
Erysipelas	49	3	6	4	3	4	6	2	6	2	3	8	2
Scarlet Fever	175	16	8	12	16	16	5	9	9	18	17	23	26
Enteric Fever	9	...	1	2	...	2	...	1	...	...	...	2	1
Puerperal Fever	10	1	...	1	...	1	2	1	...	2	1	...	1
Pyrexia (Puerperal)	36	4	2	8	1	1	3	2	1	8	...	3	3
Ophthalmia Neonatorum	7	...	...	...	2	1	...	2	1	...	...	...	1
Pulmonary Tuberculosis	133	9	8	17	13	17	12	11	8	9	10	8	11
Other Forms of Tuberculosis	84	9	8	9	4	16	12	7	3	3	5	5	3
Influenzal Pneumonia	26	1	14	...	...	...	...	...	...	1	2	6	2
Primary Pneumonia	190	20	37	7	18	17	7	7	5	13	15	19	25
Malaria	1	...	...	...	...	...	...	...	1	...	...	...	...
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro Spinal Fever	7	1	...	2	1	...	2	...	1	...	...	...	...
Encephalitis Lethargica	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...
Infective Enteritis	5	...	...	...	...	2	2	1	...	...	...	...	...
Chicken Pox	422	60	22	38	51	46	44	19	8	18	23	46	47
Measles	1169	89	25	15	4	28	16	12	6	27	121	347	479
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough (not notifiable)...	273	...	...	4	12	17	62	66	43	25	21	10	13

TABLE VD.
Isolation Hospital.

Disease for which admitted.	In Hospital Dec. 31, 1930	Admitted		Discharged	Deaths	Remaining in Hospital Dec. 31, 1931
		No.	Per cent of Cases Notified			
Enteric Fever	...	9	100.0	7	1	1
Scarlet Fever...	16	145	82.85	143	1	17
Diphtheria.....	7	65	89.06	66	3	3
Measles	...	26	2.22	20	1	5
Erysipelas	2	22	44.9	21	3	...
Pneumonia ...	...	7	3.24	5	2	...
Puerperal Fever	...	...	...	...	...	...
Other Diseases	...	51	...	38	4	9
TOTALS	25	325	...	300	15	35

TABLE VE.

Number of beds occupied daily and length of stay in Hospital of Patients who died or were discharged in 1931 whether admitted in that year or previously.

Disease for which admitted.		No. of Cases died or discharged during 1931	Total days in Hospital.	Average length of stay in days.	Total bed days in Hospital in 1931.	Average beds occupied daily.
Enteric Fever	...	8	116	14.50	125	0.34
Scarlet Fever	...	144	4399	30.55	4294	11.76
Diphtheria	...	69	1402	20.32	1589	4.35
Measles	...	21	270	12.86	301	0.83
Erysipelas	...	24	324	13.50	275	0.75
Pneumonia	...	7	122	17.43	122	0.33
Puerperal Fever	...	...	...	...	...	...
Other Diseases	...	42	826	19.66	971	2.66
Totals	...	315	7459	23.68	7677	21.03

TABLE VF.
Tuberculosis.
RESIDENTIAL INSTITUTIONS.

Average number of beds available for patients during the Year 1931.

	Observation	Pulmonary Tuberculosis		Non-Pulmonary Tuberculosis		Total
		Sanatorium Beds	"Hospital" Beds (Chestnuts Sanatorium)	Disease of Bones & Joints	Other Conditions	
Adult Males ...	None	7	13	2		22
Adult Females ...	Specially	5	16	1		22
Children under 15	Allotted	8	1	7		16
Total		20	30	10		60

TABLE VG.

Return showing the extent of Residential Treatment and Observation during the year in Institutions Approved for the treatment of Tuberculosis.

			In Institutions on Jan. 1	Admitted during the Year	Discharged during the Year	Died in the Institutions	In Institutions on Dec. 31
Number of doubtfully tuberculous cases admitted for observation.	Adults	M.	...	1	1	...	...
		F.	...	...	...	...	...
	Children	—	...	2	2	...	...
	TOTAL	...	...	3	3	...	...
Number of definitely tuberculous patients admitted for treatment.	Adults	M.	21	52	49	5	19
		F.	23	68	65	6	20
	Children	—	14	40	36	1	17
	TOTAL	...	58	160	150	12	56
GRAND TOTAL	...	...	58	163	153	12	56

TABLE V_H
Chestnuts Sanatorium.

Tuberculosis.	In Hospital Dec. 31, 1930	Admitted	Discharged	Death	Remaining Dec. 31, 1931
Males	11	26	22	4	11
Females	16	32	30	5	13
Children	...	1	1	...	...
Totals	27	59	53	9	24

TABLE V_I.
Chestnuts Sanatorium.

	No. of cases Died or Discharged during 1931	Total days in Sanatorium	Average length of stay in days.	Average Beds occupied daily.
Males	26	3747	144.12	12.5
Females	35	5381	153.74	16.0
Children	1	171	171	0.5
Totals	62	9299	149.98	29

TABLE V_J.
Tuberculosis.
Occupations of notified cases.

Description.	Number.
Under School Age	21
School Children	38
Cotton Operatives	46
Domestic Duties	22
Labourers	5
Clerical Workers	7
Shopkeepers and Assistants	6
Engineers and Mechanics... ..	3
Iron Workers	3
Boot and Shoe Workers	3
Tailors and Dressmakers	6
Other Occupations	45
No Occupation	12
Total	217

TABLE VK.

Tuberculosis.

Return showing the work at the Dispensary during the Year 1931.

DIAGNOSIS.	PULMONARY.				NON-PULMONARY				TOTAL.				Grand Total.
	Adults		Children		Adults		Children		Adults		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.—NEW CASES examined during the year (excluding contacts):													
(a) Definitely tuberculous ...	41	59	5	5	9	22	29	15	50	81	34	20	185
(b) Diagnosis not completed ...	...	1	...	1	...	...	...	...	...	1	...	1	2
(c) Non-tuberculous ...	33	57	47	23	3	1	13	8	36	58	60	31	185
B.—CONTACTS examined during the year :													
(a) Definitely tuberculous ...	3	5	...	1	...	1	3	2	3	6	3	3	15
(b) Diagnosis not completed ...	...	...	...	...	...	...	...	...	...	...	...	...	...
(c) Non-tuberculous ...	7	18	23	34	...	...	2	2	7	18	25	36	86
C.—CASES written off the Dispensary Register as :													
(a) Recovered ...	14	12	9	11	5	7	13	10	19	19	22	21	81
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ...	42	77	70	57	3	1	15	10	45	78	85	67	275
D.—NUMBER OF CASES on Dispensary Register on December 31st :													
(a) Definitely tuberculous ...	168	195	43	55	32	54	71	57	200	249	114	112	675
(b) Diagnosis not completed ...	...	1	...	1	...	...	...	...	...	1	...	1	2

TABLE VK.—(continued).

1. Number of cases on Dispensary Register on January 1st ...	686	7. Number of consultations with medical practitioners :— (a) Personal ... (b) Other ...	6 218
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...	25	8. Number of visits by Tuberculosis Officers to homes (including personal consultation) ...	73
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ...	83	9. Number of visits by Nurses or Health Visitors to Homes for Dispensary purposes ...	1719
4. Cases written off during the year as Dead (all causes) ...	68	10. Number of (a) Specimens of sputum, &c., examined (b) X-ray Examinations made in connection with Dispensary work	406 166
5. Number of attendances at the Dispensary (including Contacts) ...	2278	11. Number of "Recovered" cases re-stored to Dispensary Register, and included in A (a) and A (b) above...	3
6. Number of Insured Persons under Domiciliary Treatment on the 31st December ...	135	12. Number of "T.B. plus" cases on Dispensary Register on Dec. 31st	154

TABLE VL.

Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions approved for the treatment of tuberculosis.

Classification on admission to the Institution.		Condition at time of discharge.	Duration of Residential Treatment in the Institution.															Grand Totals
			Under 3 months			3—6 months			6—12 months			More than 12 months			Totals			
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
PULMONARY TUBERCULOSIS.	Class T.B. minus.	Quiescent ... Not quiescent ... Died in Institution	. 4 .	. 3 .	. . .	8 . .	14 . .	1 . .	1 . .	4 1 .	1 . 1	. . .	1 . .	3 . .	9 4 .	19 5 .	5 . 1	33 9 1
	Class T.B. plus. Group I.	Quiescent ... Not quiescent ... Died in Institution	. 1 1	. 5 1	. . .	4 3 .	. 5 .	. . .	. . .	2 4 .	. . .	. 2 .	. . .	. . .	4 6 1	2 14 1	. . .	6 20 2
	Class T.B. plus Group II.	Quiescent ... Not quiescent ... Died in Institution	. 4 .	. 3 1	. . .	. 6 1	. 2 1	. . .	. 5 .	1 6 1	. . .	. 1 .	. . .	. . .	. 16 1	1 11 3	. . .	1 27 4
	Class T.B. plus. Group III	Quiescent ... Not quiescent ... Died in Institution	. . 3	. . 1	. . .	. 1 .	. . .	. . .	. . .	. 1 .	. . .	. . .	. . .	. . .	. 1 3	. 1 1	. . .	. 2 4
	Bones and Joints	Quiescent ... Not quiescent ... Died in Institution	1 1 .	. 2 1	. 3 .	1 . .	. . .	. . .	1 1 .	. . .	. . .	1 . .	. . .	5 . .	4 2 .	. 2 1	5 3 .	9 7 1
	Abdominal.	Quiescent ... Not quiescent ... Died in Institution	. . .	. 2 .	3 2 .	. . .	1 . .	2 . .	. 1 .	. . .	. . .	. . .	. . .	. . .	. 1 .	1 2 .	5 2 .	6 5 .
	Other Organs	Quiescent ... Not quiescent ... Died in Institution	. . .	. 1 .	. . .	. . .	. . .	1 1 .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. 1 .	1 1 .	1 2 .
	Peripheral glands	Quiescent ... Not quiescent ... Died in Institution	2 . .	4 1 .	8 3 .	. . .	1 . .	3 . .	. . .	. . .	. . .	. . .	. . .	. . .	2 . .	5 1 .	11 3 .	18 4 .
NON-PULMONARY TUBERCULOSIS.																		

TABLE VM.

Return showing the Numbers of Persons successfully vaccinated and re-vaccinated at the cost of the rates by the Medical Officers of the Poor Law Institutions and the Public Vaccinators during the Year ended 30th September, 1931.

Name of the Poor Law Institution or Vaccination District.	Name of the Medical Officer or Public Vaccinator.	Numbers of successful Primary Vaccinations of persons :—			Number of Successful Re-vaccinations, <i>i.e.</i> , successful vaccinations of persons who had been successfully vaccinated at some previous time
		Under one year of age.	One year and upwards.	TOTAL	
East Preston No. 1	...	291	2	293	...
West Preston No. 2	Dr. D. J. Davies ...	81	4	85	1
" No. 2A	Dr. T. Pimley ...	110	10	120	2
" No. 2B	Dr. M. W. Talbot ...	34	1	35	...
	Dr. F. L. Rigby ...				
	Totals ...	516	17	533	3

TABLE VN.
Vaccination of Children whose Births were registered from 1st January to 31st December, 1931, inclusive.

Registration Sub-Districts comprised in the Vaccination Officer's District.	Number of Births.	Successfully Vaccinated.	Insusceptible of Vaccination.	Had Small Pox.	Number in respect of whom Statutory Declarations of Conscientious Objection have been received.	Died Unvaccinated.	Postponement by Medical Certificate.	Removal to Districts the Vaccination Officers of which have been duly apprised.	Removal to places unknown, or which cannot be reached; and Cases not having been found.	Number of these Births remaining on 31st January, 1932.	Total number of Certificates and copies of Certificates of Successful Primary Vaccination of Children under 14 received during the Calendar Year 1931.	Number of Statutory Declarations of Conscientious Objection actually received by the Vaccination Officer irrespective of the dates of birth of the children to which they relate, during the Calendar Year 1931.
East Preston ...	1289	496	7	...	525	78	58	9	48	68	...	...
West Preston ...	595	266	4	...	196	35	40	4	26	24	644	775
TOTAL ...	1884	762	11	...	721	113	98	13	74	92	644	775

RETURN relating to all persons who were treated at the Treatment Centre at Preston Royal Infirmary during the Year ending 31st December, 1931.

	Syphilis		Soft Chancre		Gonorrhœa		Conditions other than Venereal		TOTAL	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1. Number of persons who, on the 1st January, 1931, were under treatment or observation for :—										
2(a). Number of cases dealt with at the Treatment Centre during the year for the first time	101	140	...	...	322	73	...	...	423	213
	74	66	1	...	213	34	45	22	333	122
Total—Items 1 and 2(a)	175	206	1	...	535	107	45	22	756	335
2(b). Number of persons included in Item 2(a) known to have received previous treatment at other Centres for the same infection	12	5	...	...	25	4	...	...	37	9
3. Number of persons who ceased to attend the out-patient Clinic										
(a) before completing the first course of treatment for	61	44	...	...	62	15	...	...	123	59
(b) after one or more courses but before completion of treatment for	2	4	...	...	1	...	...	...	3	4
(c) after completion of treatment, but before final tests as to cure of	27	14	...	...	40	13	...	...	67	27
4. Number of persons transferred to other Treatment Centres after treatment for	23	8	...	...	134	29	45	22	202	59
5. Number of persons discharged after completion of treatment and observation for	84	146	1	...	341	62	...	...	426	208
6. Number of persons who, on 31st December, 1931, were under treatment or observation for	209	221	1	...	603	123	45	22	858	366
Total—Items 3, 4, 5 and 6	2435	2469	10	...	4065	1162	112	51	6622	3682
7. Out-patient attendances :—	...	...	...	...	13680	950	...	...	13680	950
(a) For individual attention by the Medical Officer ...										
(b) For intermediate treatment, e.g., irrigation, dressings, etc.										
Total Attendances ...	24,934									
8. Aggregate number of " In-patient days " of treatment given to persons who were suffering from :—	28	66	...	...	...	56	...	...	28	120
9. Examinations of Pathological material :—										
(a) Specimens which were examined at, and by the Medical Officer of, the Treatment Centre	11		1066						...	
(b) Specimens from persons attending at the Treatment Centre which were sent for examination to an approved laboratory	...		...						382	

VI. Maternity and Child Welfare.

A.—STATISTICS.

1. Birth Rate.

The number of children born was 1,881, and the birth rate was 15.66 per 1,000 living, compared with 1,975 and 15.66 in 1930. Of the 1,881 births, 953 were males and 928 females; 1,802 were legitimate and 79 illegitimate. The percentage of illegitimate births was 4.19.

A summary of the 1,715 notifications received under the Notification of Births Act reveals the fact that 72.3 per cent. notifications were made by midwives, 11.1 per cent. by the Royal Infirmary, 12.9 per cent. by the Sharoe Green Maternity Home, and 3 per cent. by doctors and patients.

2. Infant Mortality Rate.

The number of infant deaths was 165; of these 97 were males and 68 females. Deaths among legitimate children numbered 149 and illegitimate children 16. The death rate per 1,000 born was 88.

The birth rate, infant mortality rate, the causes of and age periods at death, are shewn in the appendix to this section, and to Section I.

An examination of the figures for the past 10 years shows that the improvement in Infantile Mortality has been almost entirely concerned with children over one month of age. For each of the past 10 years, approximately a quarter of the infant deaths have been those of children under one week, being at its lowest (23.1 per cent. of total) in 1925, when the Infantile Mortality was at its highest (131 per 1,000 born), and at its highest (41.4 per cent) in the year when the Infantile Mortality was at its lowest (73 per 1,000 born). Similarly, there has been no improvement in the Infantile Mortality of children under one month of age, the proportion being approximately 45 per cent. This proportion was at its lowest in 1925 (32.8 per cent.), a year of high Infantile Mortality (131 per 1,000 born), and at its highest (58.6 per cent.) in 1930, a year of low Infantile Mortality (73 per 1,000 born). The prime cause of death in the first weeks of life is premature birth and congenital defects, upon the incidence of which the ordinary machinery of Infant Welfare Centres and health visitors have little or no influence. It remains to be seen whether the very large improvements which are now being made in ante-natal work, as organised by local authorities, maternity homes, and private practitioners, will have a beneficial effect.

B.—GENERAL.

1. Maternal Deaths.

The gross number of maternal deaths within the Borough for the year 1931 was eight; seven occurred at the Preston Royal Infirmary, and one at the patient's own home. After allowing for the external transfer of four deaths of women not belonging to the Borough, and the internal transfer of six deaths of Preston women who died at Sharoe Green Maternity Home, we are left with 10 deaths belonging to the Borough. Shortly after occurrence, all maternal deaths are investigated from the point of view of sepsis, previous ante-natal

care and any untoward circumstance, accident or negligence. The results of the enquiries are summarised in the following lines :—

Place of death.		Puerperal Sepsis.			Other causes.		
Royal Infirmary	...	...	...	1	...	...	2
Sharoe Green	...	...	...	4	...	...	2
At home	...	...	...	—	...	...	1

(a) Due to Puerperal Sepsis, four of the deaths occurred in women in their first childbirth (primiparæ) and one in a woman at a birth other than the first (multipara). The source of infection cannot be stated definitely, but was regarded as being due, in all probability, to mechanical interference during operation for removal of pregnancy necessitated by patient's debility (one instance). Direct accidental infection from the nurse in charge of a hospital ward (two instances). Ulcerative pharyngitis during puerperium (one instance), and one instance of direct infection from patient's own household (two children with ulcerative tonsillitis).

(b) Due to other accidents and diseases of pregnancy, three deaths occurred in primiparæ and two in multiparæ. Two deaths were unavoidable—pulmonary embolism (a clot forming in the main vein of the lungs) and puerperal insanity being the causes. Two were due to heart failure following difficult labour and obstetrical shock, and one was due to eclampsia in a primipara. This woman first engaged a doctor, but did not seek ante-natal care. Late in her pregnancy the midwife called in a second doctor, who immediately sent the patient into hospital. She was extremely ill and 14 days post mature.

Of the ten total deaths, six were between 20 and 30 years of age and four between 30 and 40. Six had received ante-natal care, and four had no ante-natal care. In three women there was some serious co-existing disease.

Summing up the series one may say that the primary avoidable cause of death was lack of ante-natal care in four instances, error of judgment in four instances, and accidental in two instances.

2. Puerperal Fever.

There were ten cases of puerperal fever, and 36 cases of puerperal pyrexia notified during the year as occurring within the Borough. Three cases of puerperal fever were treated first at home and then at Sharoe Green Maternity Home. Of these two were under their own doctor for the confinement, the third had been in Sharoe Green, discharged satisfactorily, but had to return in eight days after her discharge. All three cases recovered. Three cases were treated at the Royal Infirmary, one of whom was confined at home, one patient recovered, and two died. Four patients were treated at home, and all recovered but it should be noted that the illness was of a much milder character than those cases removed to hospital.

There were 36 cases of puerperal pyrexia notified during the year, of these 22 were notified from the Preston Royal Infirmary. It is obvious that puerperal pyrexia is notified much more accurately from the maternity wards of a general hospital where everything possible is done to prevent an outbreak of fever. The temperatures in most cases settled within 24 hours. In the case of the other 14, which occurred at home, colds, influenza and constipation, were the underlying causes.

3. Ophthalmia Neonatorum.

There were seven cases of Ophthalmia Neonatorum notified during the year to which 31 visits were paid. Of these, three were admitted to the Isolation Hospital, one to the Royal Infirmary, and three were treated at home by private medical practitioners with daily attendance from Queen's nurses. I am happy to report that in all seven cases the vision was unimpaired at the end of the treatment.

4. Stillbirths.

During 1931 106 stillbirths were registered; of these 44 were investigated by the Health Visitors.

The duration of pregnancy was as follows :—At or under seven months, 12 = 27.27 per cent. ; at or under eight months, 7 = 15.91 per cent. ; at full term, 25 = 56.82 per cent.

The classification of causes so far as obtainable is as follows :—foetal deformities and malpresentation 17, ill-health of mother 16, born before arrival of medical and nursing assistance 4, other causes 7.

5. Inspection of Midwives.

Thirty-five midwives gave notice of their intention to practise in the Preston area during 1931, of these 28 held the Central Midwives Board Certificate, and seven were bona-fide midwives. 123 inspections of bags and registers were made, 78 by the superintendent of midwives, 20 by the Health Visitors in her absence, and 25 at North Road by the Medical Inspector for special reasons. Five midwives were suspended for a period of not longer than 24 hours for the purpose of disinfection after contact with puerperal fever. These were compensated for loss of work at a cost of £2 12s. 6d.

Medical help was sought for by midwives in 107 cases during the year. An analysis of the causes gives the following information :—

ON BEHALF OF THE MOTHER.

During pregnancy :—				Ruptured perinæum	...	...	13
Ante partum hæmorrhage	...	5		Retained placenta	...	...	2
Illness of mother	...	2		Premature rupture of mem-			
During labour :—				branes	...	...	4
Malpresentation	...	22		Post partum hæmorrhage	...	7	
Delayed labour	...	19		During the puerperium :—			
Uterine Inertia	...	7		Ill-health of mother	...	...	4
Contracted pelvis	...	4		Rise of temperature	...	...	4

ON BEHALF OF THE CHILD.

Prematurity	...	...	8
Malformation of foetus	...	...	1
Illness of child	...	...	7

It is of interest to note that the percentage of births attended solely by midwives has increased from 59 in 1930 to 65 in 1931, while the percentage attended by doctors and midwives acting together has fallen from 37 to 30. Two per cent. of the confinements were attended by doctors associated with unqualified or handy women as compared with one per cent. in 1930.

Of the 107 emergency calls by midwives, 99 were submitted to the Milk and other Services Sub-Committee for assistance. The whole cost was granted in 63 instances, part cost in 13 instances, while the 23 remaining applications were refused. The cost to the Council was £137. 142 applications for the services of a midwife were received by the Committee. In 96 instances the whole cost was granted, and in 36 part cost granted. This service cost the Council £171.

Only eight applications were received for services of Home Help. Whole cost was granted in four instances, and part cost in one instance, at a cost to the Council of £9.

6. Inspection of Maternity Homes.

There are nine registered maternity homes in addition to the Preston Royal Infirmary, one was added to the list in December. There were no still-births or maternal deaths at any. Two of the homes were under special supervision for a period of three months owing to unsatisfactory nursing conditions. A total number of 29 visits were made.

7. Infant Welfare Centres.

Satisfactory and increasing numbers at all the centres gives an excellent record of steady work throughout the year. Cuttle Street, with its new premises, was a formidable rival to Deepdale Mill Street during the spring months, but later in the year the position re-adjusted itself, and both clinics attracted the mothers from their own districts. One is pleased to note that the increase in breast feeding noted during the preceding year has been more than maintained, although it is disappointing to have to admit that the poorer mothers still show a higher percentage of breast feeding than the so-called better class mother, despite much more extensive propaganda work amongst the latter during the year. The toddler receives very little attention, not so much the toddler of three to four years, who manages to appear for examination once or twice during the year for some particular reason, but the ex-baby, the child who is, in reality, still a baby. There has been a noticeably uniform decrease in the sale of dried milk at all the clinics, possibly due to the price and the economic situation, cow's milk having priority of place amongst babies who have not been breast-fed. The lectures on domestic subjects, six in cookery, six in dressmaking, and three in housewifery, were all well attended and much appreciated by the mothers. A course of eight lectures in Home Nursing was given at each centre by the Health Visitor in charge. Altogether 127 mothers made 2,919 attendances.

The total attendances of children at all the centres numbered 28,599, as compared with 27,598 and 25,752 in 1930 and 1,929 respectively.

Sale of Dried Milk, etc., at the Centres.

There was a slight fall in the value of goods sold at cost price, from £755 in 1930 to £702 in 1931.

There was, however, a marked increase in the amount of food, mainly cows milk, supplied free to nursing and expectant mothers. The cost being £1,406 as compared with £1,246 last year.

8. Massage.

Following upon the opening of the Cuttle Street Health Centre, a new massage clinic was started there for mothers attending Deepdale Mill Street and Cuttle Street Infant Welfare Centres, the children from the other centres being still treated at North Road. The department has been carried on in a satisfactory manner, and much benefit has been shown, particularly in the case of rickets. The following statement shews record of work done :—

	North Road Centre.		Cuttle Street.	
No. on register 31st December, 1930	...	99	...	0
No. of new cases	...	77	...	50
No. discharged cured	...	115	...	38
No. on register 31st December, 1931	...	61	...	12
No. of treatments given	...	2688	...	450
No. sent to orthopædic clinic	...	26	...	—
Maximum number of treatments	...	18	...	15
No. of sessions	...	244	...	42
Average treated per session	...	10	...	10

9. Ante-natal Centre.

The figures for the ante-natal work for 1931 are extremely disappointing. For five years in succession the North Road ante-natal clinic showed a definite increase each year, until in 1930 the record attendance of 1,155 made efficient individual attention a very difficult matter. It was therefore decided to start a new ante-natal centre at Cuttle Street, and to limit the mothers from the east end of the town to attendance there. Unfortunately this policy has had an adverse effect on both clinics. Working-class mothers will not attend an ante-natal centre near their own homes owing, in the earlier months, to a desire to keep the knowledge of their pregnancies a secret from their neighbours. A considerable proportion have objected to attending a clinic where schoolchildren are also present. Those mothers who were told that Cuttle Street was their centre simply did not attend at all.

One pleasing feature of the year has been the keenness of the mothers who did attend, they have evinced much more interest in proper hygiene than in previous years.

The number of patients sent by midwives was 73, as against 139 in the previous year. Compensation for loss of work was paid in 11 cases at a cost of £7 7s. 6d. 257 patients were sent from the Infant Welfare Centres as shown below :—

Edward Street	...	57
Fylde Road	...	50
Manchester Road	...	51
Walker Street	...	50
Deepdale Mill Street	...	49

Cuttle Street mothers (58) all came from Cuttle Street and Deepdale Mill Street Clinics.

10. Artificial Sunlight.

As mentioned in a previous report, the results of artificial sunlight on pre-school children are disappointing. Dread of the lamp, coupled with minor ailments and epidemics among toddlers, make the attendance and subsequent treatment irregular. To be effective a course of artificial sunlight must be continuous. The following is the analysis :—

No. on register 31st December, 1930 ...	...	...	14
No. of new cases ...	...	...	59
No. discharged ...	...	...	63
No. on register 31st December, 1931 ...	...	...	10
No. of treatments given ...	...	...	650
Maximum number of treatments ...	...	...	12
No. of sessions ...	...	...	85
Average treated per session ...	...	...	8

11. Dental Treatment.

W. A. Lilley and J. C. Knowles, Dental Surgeons.

From January, 1931, the operative dental treatment has been undertaken by the school dental surgeons, the prosthetic branch of the service continuing to be carried out by Mr. P. A. Gardner.

The number of patients attending has shown an increase of 64.6 per cent. over the previous year, and since June, 1931, treatment has been available at Cuttle Street Centre in addition to North Road, thus lessening the travelling distance for many patients.

Expectant mothers amounted to 21.8 per cent, and children 27.4 per cent. of the total patients. A great proportion of the ante-natal cases present themselves when pregnancy is too advanced to permit of more than emergency and palliative treatment, and it is emphasised that earlier attendances would allow of the removal of septic foci and a restoration of function to the mouth before confinement, with consequently greater benefit to the mother and child.

The following tables show the work carried out under the Committee's scheme during the year under review :—

Sessions of treatment ...	...	61		
Nursing mothers attended ...	...	137		
Expectant Mothers attended ...	...	59		
Children ...	...	74		
Total attendances ...	...	575	Per session	9.43
Fillings ...	...	112	„	1.84
Extractions ...	...	971	„	15.92
Dressings ...	...	46	„	0.75
Scalings ...	...	17	„	0.28

Dentures were provided in 58 cases during the year, and a comparative table of the applications and costs for the past six years is given below :—

Year.	No. of Applications for Dentures	Not Granted	Granted Free	Part Cost Granted	Cost borne by					
					Applicant			Council		
					£	s.	d.	£	s.	d.
1926	13	2	1	10	10	0	0	33	15	0
1927	24	2	...	22	14	7	6	26	17	6
1928	34	...	1	33	53	5	0	97	9	6
1929	26	...	...	26	28	5	0	70	14	3
1930	66	10	2	54	51	6	9	194	0	3
1931	58	—	—	58	33	15	11	111	16	7

12. Children put out to Nurse.

There were 22 boarded out children in Preston during the year. They were all under regular supervision, babies up to 12 months are visited once monthly by the Health Visitors, who are Infant Life Protection Officers. Between one and five years the children are visited every three months unless the conditions are unsatisfactory, when more visits are made. As the remuneration and circumstances differ individually, it is impossible to classify these boarded-out children under any particular heading. The remuneration varies from 10s. to £1 weekly.

13. Voluntary Workers.

The Medical Officer of Health again acknowledges his indebtedness to the Preston Infant Welfare Voluntary Workers' Association for their continued service to the clinics and to the poor mothers of the town. During 1931 there were 53 voluntary workers as compared with 50 of the previous year. The annual Christmas parties and summer picnics were carried out with their usual energy and enthusiasm. The new Infant Welfare Centre at Cuttle Street was, on opening, immediately supplied with an efficient band of helpers for which grateful acknowledgment is made. During the latter part of the summer the Voluntary Workers' Association sent two mothers from each centre to Lytham for one week's holiday.

Owing to the state of national emergency which existed in October, 1931, it was decided to postpone any Baby Day celebrations for a period of one year. The usual competitions in the making of infant clothing were held at each centre, and aroused great enthusiasm.

The number of dinners given under the Free Dinners for Expectant and Nursing Mother's Scheme decreased during the year. A total of 5,042 meals were provided for 172 mothers, as against 6,636 meals to 179 mothers. This work is of the greatest importance, and with the other social work of the voluntary workers is of the greatest value to the Maternity and Child Welfare movement.

14. Maternity Institutions.

Apart from the small Nursing Homes registered as such and accepting medical or maternity cases in small numbers, there are two larger units devoted to maternity work. These are the Preston Royal Infirmary, which is classified as an institution provided by a voluntary association, and subsidised by the Council; and the Sharoe Green Hospital Maternity Home, which is provided by the Council. The principal details of the work done at these Institutions is set forth in tabular form below.

	Preston Royal Infirmary Maternity Department.			Sharoe Green Lane. Maternity Home.		
No. of beds, exclusive of isolation and labour beds	...	...	16	...	...	34
No. of women admitted during 1931 ...	...	...	430	...	...	299
No. of Live Births	...	...	386	...	...	282
No. of Still Births	...	...	44	...	...	17
Infantile deaths under four weeks of age	...	...	12	...	...	12
No. of Maternal deaths	...	...	7	...	...	10
Ante-natal attendances	...	...	2751	...	...	1367
Post-natal attendances	...	...	496	...	...	—

Forty-three applications were received for a bed at Sharoe Green Maternity Home. In nine of these whole cost was granted, in 29 cases one half cost was granted, in two cases three-quarter cost was granted, and in three applications no assistance was given. Twenty-six applications were received in respect of a bed in the maternity ward at the Royal Infirmary. In five instances the whole cost was granted, in 17 instances half the cost, and in two instances three-quarters of the cost was borne by the Council. The total cost of this service was £188.

15. Work of the Health Visitors.

It would be ungrateful to close this section without a special reference to the Health Visitors. They act as an immediate bulwark between the mother and adverse conditions. On them the mothers rely for information on every aspect of child rearing.

During the year they paid 1,019 visits to expectant mothers, they visited 1,702 new-born infants, and paid 6,215 re-visits to children under one year of age. They investigated and advised upon 858 cases of various diseased conditions, principal among which were measles and whooping cough. In addition to this they were able to pay 9,717 visits to children of pre-school age. In all they paid 20,989 visits.

In addition to the home visiting the remaining time available was spent in the staffing of seven infant welfare centres, ante-natal clinics, dental clinics, orthopædic clinics, and in the treatment of minor ailments, at North Road and Cuttle Street.

APPENDIX
TO
SECTION VI.

TABLE VIA.
Infant Deaths.

Year.	No. of Births.	Under 1 Week.			Under 1 Month.			Total.	
		No.	Rate per 1,000 Born.	Per- centage of total Infant Deaths.	No.	Rate per 1,000 Born.	Per- centage of total Infant Deaths.	No.	Rate per 1,000 Born.
1921	2811	79	28.1	25.0	127	45.2	40.2	316	112
1922	2482	68	27.8	28.1	100	40.3	41.3	242	97
1923	2426	59	24.2	24.7	100	41.2	42.0	238	98
1924	2328	63	27.6	28.0	98	42.1	43.1	225	97
1925	2174	66	30.3	23.1	94	43.2	32.8	286	131
1926	2160	62	28.7	31.8	90	41.6	46.1	195	90
1927	1892	53	28.0	25.7	88	46.5	42.7	206	109
1928	1916	51	26.6	29.1	80	41.7	41.7	175	91
1929	1967	59	30.0	28.8	89	45.2	43.9	205	104
1930	1975	60	30.4	41.4	85	43.0	58.6	145	73
1931	1881	47	24.9	28.4	70	37.2	42.4	165	88

TABLE VIb.
Infantile Mortality, 1931.

Nett Deaths from stated Causes at various Ages under One Year of age.

CAUSE OF DEATH.	Under 1 Week.	1 - 2 Weeks.	2 - 3 Weeks.	3 - 4 Weeks.	Total under 1 Month.	1 - 3 Months.	3 - 6 Months.	6 - 9 Months.	9 - 12 Months.	Total Deaths under One Year.	
All Causes:—											
Certified	45	8	5	10	67	28	27	18	17	158	
Uncertified	2	...	...	...	2	1	1	1	2	7	
										M	F
Small Pox	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	1	...	1	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	...	...	...	...	...	...	1	1	...	1	1
Diphtheria and Croup	...	...	...	...	...	...	...	...	1	1	...
Erysipelas	...	...	...	...	...	...	2	...	...	1	1
Tuberculous Meningitis	...	...	...	...	...	...	...	...	...	...	...
Abdominal Tuberculosis	...	...	...	...	...	...	...	...	...	...	...
Other Tuberculous Diseases	...	...	...	...	...	...	1	...	...	1	...
Meningitis (not Tuberculous)	...	...	...	...	...	...	1	1	1	...	3
Convulsions	3	...	...	...	3	1	...	3	4	5	6
Laryngitis	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	...	...	...	1	1	3	3	...	4	8	3
Pneumonia (all forms)	2	1	1	2	6	3	9	9	9	23	13
Diarrhoea	...	...	...	...	...	1	...	...	...	1	...
Enteritis	...	1	...	1	2	3	2	1	...	5	3
Gastritis	...	...	1	...	1	2	...	1	...	1	3
Syphilis	...	...	...	...	...	...	...	...	...	...	...
Rickets	...	...	...	...	...	...	...	...	...	...	...
Suffocation, overlying	1	...	...	...	1	...	...	...	...	...	1
Injury at Birth	...	...	...	...	...	...	...	...	...	...	...
Atelectasis	3	...	2	...	5	...	...	...	...	3	2
Congenital Malformations	7	1	...	...	8	4	1	1	...	9	5
Premature Birth	19	3	...	5	27	6	1	...	...	20	14
Atrophy, Debility and Marasmus	...	...	...	1	1	2	7	...	...	7	3
Other causes	12	2	1	...	15	3	1	1	...	11	9
Total.....	47	8	5	10	70	28	29	19	19	98	67

TABLE VIc.

Maternal Deaths. Incidence, Morbidity and Mortality.

5 Year Periods. Average.	No. of Nett Births	No. of Cases Notified.		PUERPERAL FEVER.			Other Accidents and Diseases of Pregnancy.		Total Mortality from Child Birth.
		Puerperal Pyrexia	Puerperal Fever	No. of Deaths.	Incidence per 1000 Births.	Mortality per 1000 Births.	No. of Deaths	Mortality per 1000 Births.	
1911-1915	2751	...	6.2	2.4	2.26	0.89	10.0	3.61	4.51
1916-1920	2262	...	6.8	4.0	2.47	1.65	6.0	2.43	4.08
1921-1925	2444	...	8.0	4.8	3.28	1.97	8.0	3.29	5.25
1926-1930	1982	21.0	6.6	5.4	14.02	2.69	7.2	3.63	6.32
1931	1881	36	10	5	19.14	2.66	5	2.66	5.32

TABLE VIc. (1).

Attendances at Ante Natal Centre.

Year.	North Road.		Cuttle Street.		Total.	
	New Cases.	Total Attendance	New Cases.	Total Attendance	New Cases.	Total Attendance
1928 ...	346	792	...	...	346	792
1929 ...	346	904	...	...	346	904
1930 ...	431	1155	...	...	431	1155
1931 ...	297	820	58	137	355	957

TABLE VI.D.

Allocation of Births, Infant and Maternal Deaths.

	Total No. of Births Registered	Nett Births	Nett Infant Deaths	Puerperal Fever and Pyrexia		Deaths from other diseases of Pregnancy and Parturition
				Cases	Deaths	
Private Houses	1387	1376	111	23	..	1
Nursing Homes	13	4	...	...	...	...
Royal Infirmary	386	221	27	22	1	2
Isolation Hospital	..	...	3	...	...	...
Midwives Homes	64	43	6	1	...	..
Other Institutions	...	237	18	...	4	2
(Inward Transfers)						
Total	1850	1881	165	46	5	5

TABLE VI.E.

Allocation of Attendances at Centres.

Situation of Centre	Total Infants (a)	New Infants included in (a)		Expectant Mothers	Total Attendances 1931	Total Attendances 1930
		(b)	Older Children			
Cuttle Street	4100	397	209	183	4492	...
Deepdale Mill Street .	3375	230	353	311	4239	5816
Walker Street	3448	209	264	267	3979	4311
Fylde Road	4485	302	535	398	5418	5314
Edward Street	3106	179	136	311	3553	4032
Manchester Road	3768	186 ³	184	285	4237	5332
North Road Centre ..	2524	179	133	24	2681	2793
Ante-Natal Clinic	...	...	...	957	957	1155
Totals	24806	1682	2014	2736	29556	28753

VII. THE SCHOOL MEDICAL SERVICE.

2.—CO-ORDINATION.

The Medical Officer of Health is the Superintendent School Medical Officer. Maternity and Child Welfare records of children reaching five years of age are passed on to the School Medical Service. There is constant interchange of information going on between the School Medical, Tuberculosis, Maternity and Child Welfare, and Public Health Departments.

A scheme for the co-ordination of the work of Health Visitors and School Nurses has received the approval of the Council and is now before the Board of Education and the Ministry of Health.

3.—SCHOOL HYGIENE.

The sanitary condition of the schools has been the subject of reports to the Committee on more than one occasion. I would refer readers to the reports of 1927 and 1928 for details.

During the year the Stoneygate Nursery School was opened, and two Nursery Classrooms were added to the Frenchwood Council Junior School.

The Director of Education informs me that during the year decorations were carried out at the following schools :—

English Martyrs' Girls and Infants, and Central (Kenmure Place), St. Augustine's R.C. Girls' and Infants', St. Joseph's R. C. Boys' and Infants', St. James's C.E., St. Mary's C.E., St. Matthew's C.E. Branch Infants', St. Saviour's C.E. (Malt Street and Manchester Road), Ribbleton Avenue Wesleyan Mixed, Roebuck Street Council (outside only), Hinckman Memorial, Eldon Street Council (part only), Frenchwood Council Junior, Blessed Sacrament R.C., St. Gregory's R.C., Open Air School (part only), Marsh Lane and Maitland Street Domestic Science Centres (outside only), Glover's Court Domestic Science School (part only).

The playgrounds of St. Jude's, St. Thomas's Girls', English Martyrs' R.C. Infants', and St. Augustine's Boys' were re-surfaced.

The number of schools, their accommodation and average attendance for the year ended 31st March, 1931, is set forth in Table X of the Appendix. Comparison with previous years shows that the average attendance is 62 more than that of 1930, which was 96 more than that of 1929.

4.—MEDICAL INSPECTION.

The three age groups examined at routine inspections during 1931 were : (1) new entrants, children who had not been examined since their admission to school; (2) intermediates, eight years old children, and (3) leavers, aged twelve or over. The entrants group numbered 2,013, the intermediates 1,859, and the leavers 1,159.

In addition to the ordinary routine inspections there were 1,047 children examined at the clinics during the last term of their attendance at school for employment purposes. It is intended that these examinations shall be a guide to the officers of the juvenile employment bureau in choosing suitable occupations for the children concerned.

Seventy-two children were seen as special cases at the schools and 2,964 as special cases at the various clinics; 2,183 re-inspections were carried out at the schools and 4,438 re-inspections at the clinics.

All routine groups are less than last year, entrants by 21, intermediates by 303, leavers by 93. Other routine inspections which consist mainly of school leavers immediately before leaving are increased by 608. The examination of the last-named group was established three years ago and takes place at the term ends.

Other inspections including special examinations at the schools and at the medical inspection clinics are 111 less than last year.

Re-inspections in schools and clinics are reduced by 515.

Full particulars of the numbers examined in the various age groups and otherwise during the last five years are set out in Table XI of the Appendix.

5.—FINDINGS OF MEDICAL INSPECTION.

The findings of the Medical Officers and the Nurses during medical inspections at the clinics and at routine inspections at schools are set out and discussed under this heading. Tables giving detailed particulars of the numbers dealt with are in the Appendix to this report and are referred to by numbers in the following paragraphs.

Four clinics are in operation, situated in the Miller Arcade, at Cuttle Street, at Barlow Street Wesleyan School and at the Open Air School, the first-named being the principal centre. The total of new cases seen is slightly higher than last year. The number of new cases in 1931 was 2,854, and in 1930, 2,848, and the number of attendances 7,250 and 7,846.

A new Health Centre for School Medical Work and Maternity and Child Welfare work combined was opened at Cuttle Street on 31st January by the Minister of Health. Modern ideas in clinic construction have been embodied in this building. The attendance at this clinic has been very good from the surrounding schools. Since opening there have been 1,903 attendances for medical inspection and 13,455 for minor ailments during the year under review.

A nursery school for children under five was opened on 28th October. It is situated in Lennox Street and is thus in the centre of one of the poorest areas in Preston, where it is most needed. It was constructed to receive 70-100 children. Combined with this school is a kitchen for supplying free meals to necessitous children, and a dining room for these children is above the school, with a separate entrance. A clinic for the medical inspection of the children is held once a week in the school and the nurse in charge attends daily for minor ailments treatment.

Table XII gives full particulars of the work done and the attendances for the last five years.

The largest groups of specific defects are skin diseases, diseases and defects of the eyes and defects of the ear, nose and throat. The group of other defects, which form the biggest number, consists of minor injuries, septic sores and temporary minor ailments not appearing in the classification.

A considerable decrease has taken place in the amount of time lost by children on account of exclusion certificates by the Medical Officers. The number of school sessions lost in this way during the year was 45,546, compared with 56,949 in 1930, and this gives an average for each new case of 15.9 sessions, compared with 20 last year. The number of attendances lost per child in attendance at school equalled 2.75, as compared with 3.46, 3.83 and 5.03 in previous years.

(a) Uncleanliness.

The number of girls inspected for condition of cleanliness of head was considerably increased and the number requiring attention was slightly increased on the 1930 figures. 74% of the children were found to be absolutely free from nits, which is 1% below the figures obtaining last year. These figures can be taken as definitely good when one considers the serious difficulties experienced by many housewives in maintaining a reasonable standard of cleanliness in the absence of proper housing and facilities afforded therein.

(b) Minor Ailments.

Table XIII of the Appendix gives a classification of the defects treated, the clinics at which they attended and the attendances for the last five years, at each clinic. The total attendances are increased by 2,754, while the number of new cases is diminished by 351.

The clinics are for the treatment of minor defects only and these consist chiefly of contagious diseases of the skin, eye and ear defects and minor injuries, sores and wounds.

(c) Tonsils and Adenoids.

Details of the number of children found at routine medical inspections to be suffering from enlarged tonsils and adenoids are set forth in Table XIV of the Appendix.

Including cases found during special inspections and re-inspections at schools, 530 defects of this character were referred for treatment, the numbers for the preceding years being 316, 340, 318 and 378. The proportion of children comprised in the three age groups suffering from enlarged tonsils and adenoids was 7.75 per cent., as compared with 4.05 per cent. in 1930. In addition to those actually recommended for treatment, 480 children (343 found at routine inspections and 137 at special and re-inspections) were referred for further observation. Many cases of defects are observed at the medical inspection clinics and the following paragraphs relative to treatment include these cases in addition to those already mentioned.

The following is a summary of the action taken during the last five years in cases of diseased tonsils and adenoids :—

	1927	1928	1929	1930	1931
No. referred for treatment from :—					
(a) Routine Groups	311	275	267	226	380
(b) Re-inspections and Special Cases	67	43	73	90	150
No. recommended to Preston Royal Infirmary for treatment	530	492	434	486	596
No. operated on at Preston Royal Infirmary	531	422	454	483	420
No. operated on by private practitioners	13	7	5	10	3
Received other forms of treatment ...	96	123	128	131	97

(d) Tuberculosis.

Fifty-six children suspected to be suffering from pulmonary tuberculosis were referred to the Tuberculosis Officer for his opinion. Eight of these cases were reported to be suffering from tubercular glands, four pulmonary tuberculosis, and one abdominal tuberculosis. The remaining children were considered to be suffering from bronchitis or other non-tuberculous defect.

All cases of active surgical tuberculosis are referred to the Tuberculosis Officer, who makes the necessary arrangements for admission into beds controlled by the Dispensary organisation in the various institutions. Quiescent cases are referred to the Orthopædic Clinic.

(e) Skin Diseases.

RINGWORM.

Two cases only were found at routine medical inspections. Seventy-two new cases were referred direct by parents and teachers to the minor ailments treatment clinic. Including thirteen children receiving treatment at the beginning of the year, 81 cases were discharged cured. Comparative figures are given at the end of this paragraph. All severe cases of ringworm of the scalp are referred to the Preston Royal Infirmary for X-Ray treatment. Four cases were referred for this purpose during the year.

SCABIES.

Ten new cases of this defect attended the clinics and were either treated or the parents instructed as to treatment. Owing to the extensive character of some of these cases it is considered advisable that certain of them should be attended to at home. Success is invariably obtained by treatment with baths and sulphur in the form of inunctions.

IMPETIGO.

The number of new cases treated in 1931 was 405, as compared with 276 in 1930. This disease causes a very small amount of school exclusion.

Sixty-two other cases of skin disease of a miscellaneous character were referred to the clinics and treated. These include eczema, dermatitis, herpes, psoriasis and other unspecified skin disorders.

A comparison of the new cases of skin diseases treated during 1931 and four previous years is as follows :—

				Ringworm.	Scabies.	Impetigo.	Other Skin Diseases.
1927	...	...	...	149	7	653	67
1928	...	...	...	134	10	609	76
1929	...	...	...	133	11	423	72
1930	...	...	...	150	5	276	54
1931	...	...	...	72	10	405	62

(f) External Eye Disease.

Three hundred and twenty-five cases of external eye disease were referred to the clinics and treated, as against 288 in 1930 and 318 in 1929. The number of minor eye diseases found at school medical inspections, as in the case of skin diseases, is very small, the total this year being 23, and these are usually directed to attend the clinic. Of the 366 cases actually receiving treatment during the year, 302 were discharged.

(g) Vision.

The numbers of children found to have defective vision and/or squint at school medical inspection and particulars of the refraction work carried out by the School Medical Service are shown in Table XV of the Appendix.

In addition to the defects found, as shown in the table, many come under the notice of the doctors at the inspection clinics and are referred for refraction, and the table relating to the work of the refraction clinic and also the following paragraphs include these cases.

81.7 per cent. of appointments were kept as compared with 82 per cent. in 1930.

Of the 959 children who had refractions carried out, 577 were new cases, and 382 had previously had their vision tested at the refraction clinic. 416 of the 577 new cases required glasses and received prescriptions, and 264 of the 382 old cases required new glasses or the lenses in their existing spectacles changing and were given prescriptions accordingly. 454 children attended for verification of new glasses and 928 attended for their annual review, as compared with 641 and 861 in the previous two years.

A total of 680 or 70.9 per cent. of the number of children submitted to refraction were found to require glasses and were given prescriptions, and 526 or 77.3 per cent. of these children obtained them, as compared with 78 per cent. and 94 per cent. in 1930.

In 84 instances where, by reason of poverty, the parents were unable to pay the whole or part of the cost, the glasses were obtained and the deficiency made good by the Education Committee.

Eleven children were treated by private practitioners and eight by opticians and, of these, eighteen obtained glasses.

(h) Ear Disease and Hearing.

The attendances in respect of the treatment of otorrhœa (running ears) form the biggest proportion of attendances for specified diseases. The cure

of these cases is a slow process and consequently the children concerned attend over a long period. As in the case with other minor ailments, few defects of this kind are observed at routine inspections, there being only 21 cases of discharging ears referred for treatment. The majority of these are directed to attend the treatment clinic. Altogether, 279 new cases attended for treatment and, including 73 children on the books at the beginning of the year, 252 were discharged as cured. Unfortunately, some of the discharged cases recur and, of course, return to the clinic. These return cases are entered as new cases in the records and this causes the actual number of children who suffer from running ears to appear larger than it really is. During the year arrangements have been made to treat suitable cases of otorrhœa by zinc ionization in the clinics.

(i) **Enlarged Cervical Glands (Non-tubercular).**

The total number of children found to have enlarged glands of the neck during the year was 125; 22 of these were discovered at school medical inspections and 103 at the inspection clinic. The simple cases are usually directed to have treatment at the clinic or at home and the more severe cases, where medicinal treatment is indicated, instructed to attend their own medical practitioners. Some septic focus in the head and neck such as impetigo, sores, boils and septic teeth is usually the source of this defect.

(j) **Dental Defects.**

School dental treatment for the year 1931 was commenced under a handicap of some ten months' arrears owing to the long illness of the late Mr. Hutson, and the increasing number of routine age groups. In the meantime caries had progressed to an alarming extent; 71.65 per cent. of those examined at the 22 schools inspected during the year required fillings, compared with 47.77 per cent. in 1930, and in addition to the increased incidence of decay there was an increase in its severity, necessitating longer treatment for each patient. Though hindered by lack of clerical assistance following the death of Miss Chapman, the augmented staff of three dental surgeons regained some of the leeway and treated 6,070 children at the clinics, comprising 2,502 routine cases and 3,568 casuals, compared with 4,623, or 1,499 routine and 3,124 casuals in the previous year. This shows a gratifying increase of 67 per cent. routine patients and 14 per cent. casuals.

The "casual" attendances are mainly in respect of some dental emergency, e.g., toothache or abscess, and it will be seen from Table XIX that the bulk of these are between the ages of 6 and 10 years, i.e., the period during which the temporary teeth are ceasing to function and requiring extraction. The later age groups—notably ages 11 to 13—reveal the highest number of extractions of permanent teeth, usually the six-year-old molars in cases who have refused conservative treatment.

It is noted that many parents consistently refuse to allow their children's teeth to be saved by fillings when such treatment is advised, yet are quick to demand extractions as soon as pain is experienced. The Committee's scheme for saving the children's teeth might be more successful if repeated refusal of treatment by fillings deprived them of the right to have extractions at the clinic, thus allowing the following up scheme to be concentrated on the more

profitable field of those who, whilst refusing at first, often through the mistaken idea that the teeth in question belong to the temporary set, accept treatment later after explanation. The acceptances amounted to 64.55 per cent. of those found to require treatment, a decrease on the figures of 76.51 per cent. for 1930, 75.52 for 1929, and 76.35 for 1928, attributable in some measure to the drastic curtailment of the following-up, in the effort to make a complete round of the schools in a shorter time.

An investigation of over 900 cases revealed that 42 per cent. either did not clean their teeth at all, or else so seldom as to be of no practical benefit. Whilst appreciating the value of the occasional talks by the teachers on the subject of dental decay, the school dental surgeons are of the opinion that a scheme of instruction embracing all the children at regular intervals would be more successful in its results.

Detailed statistics for the year will be found in Tables XVI to XX of the Appendix, and it will be observed that fillings numbered 9,151 and extractions 5,170, whilst general anæsthetics were administered in 839 cases, the increases over the figures for 1930 being 44 per cent., 16.5 per cent. and 20 per cent. respectively.

(k) Defective Speech.

No new cases of speech defect were discovered at the routine medical inspections during the year, but four were observed at the inspection clinics.

(l) Heart and Circulation.

Nineteen children with functional disease of the heart, that is, disorderly action or rhythm without permanent damage, were found at routine medical inspections and referred for treatment to their own doctors. Fifty-four other children similarly affected were referred for further observation. There were 21 cases examined at the clinics and kept under observation.

There were three cases of actual organic heart disease found in the groups examined at the routine medical inspections, and only one such case was observed at the clinic. In addition to these, there were 42 children found to be suffering from anæmia at school medical inspections and referred for treatment by their own doctors and 12 referred for further observation. 61 cases of anæmia were kept under observation at the clinic. Of the whole group of this class of case, 20 remained on the books at the end of the year.

(m) Lung Diseases.

Bronchitis was found in 65 instances at the school inspections. In addition, 55 cases were referred for further observation and, at a later examination, two of these were found to have definite defects. In all these cases parents are requested to present the children to their own doctor for treatment. 235 children were discovered at the inspection clinics to have defects of this character (143 with bronchitis and 92 with other disease of the lungs) and including 28 in attendance at the beginning of the year, 206 cases were kept under observation.

(n) **Nervous System.**

Three cases of epilepsy and one case of chorea were discovered during inspection of the routine groups. Epilepsy, chorea and other nervous conditions as causes of defective health are, in almost every case, referred to the inspection clinics direct by parents, and in this way 12 cases of epilepsy, 31 cases of chorea and 10 other cases of defects of the nervous system were observed and dealt with.

Fourteen cases of epilepsy are known to the school medical service, 12 of which are mild and two major conditions. The twelve mild epileptics attend public elementary schools. Of the two severe cases one is in a mental defective colony and the other does not attend school.

(o) **Crippling Defects.**

There were, during school medical inspections, five cases of deformity due to rickets and 24 cases due to birth palsies, infantile paralysis and the like, noted and recommended for treatment. There were altogether 35 children suffering from some form of deformity who came under the observation of the medical officers at the inspection clinics. There are in all, 140 children between the ages of five and sixteen known to the school medical service at the present time who have some degree of deformity and these are under the treatment or supervision of the orthopædic organisation. 110 of these children attend public elementary schools, 17 are not able to attend school or are over fourteen years of age, and six are in a certified hospital school.

During the year 57 new cases of defect attended the clinic, compared with 81 in the previous year. A classification of total cases under treatment is as follows :—

Paralysis	...	...	...	...	...	50
Congenital Deformities	...	...	...	...	...	35
Other Deformities	...	...	...	...	...	36
Rickets	...	...	...	...	...	39
Inflammations	...	...	...	...	...	6
Tuberculosis	...	...	...	...	...	13
Nervous Diseases	...	...	...	...	...	6
Miscellaneous	...	...	...	...	...	1
Unclassified	...	...	...	...	...	5
Total						191

Of the new cases, 26 were the responsibility of the Education Committee, and 31 of the Maternity and Child Welfare Committee. The figures for 1930 were 28, 51 and two of the Tuberculosis Committee. 134 children from previous years were re-examined by the Surgeon, so that, with the addition of the 57 new cases, a total of 191 cases attended the clinic during the year. 104 of the total were chargeable to the Education Committee, 74 of the Maternity and Child Welfare Committee and 13 of the Tuberculosis Committee.

A total of 1,399 attendances was made, an increase of 37 on last year's figure; 57 of these were new cases, 328 reviews by the Surgeon and 1,014 reviews by the Nurse. The proportion of attendances upon which the allocation of expense was made to the committees mentioned was 795, 478 and 126,

respectively. 128 children attended the Nurse's sessions for remedial exercises, others for measuring and fitting of splints, to receive instructions and for general review of the case. Six plaster jackets were fitted at the clinic. The parents of three children refused treatment.

There were ten whole-day sessions at which the Surgeon and Nurse attended and the Nurse held 40 whole-day sessions alone. The numbers last year were ten and 35 whole-day sessions, respectively.

110 splints or appliances were supplied at the clinic. These splints have a wide range and include iron, aluminium, celluloid and leather splints and calipers, spinal frames and specially designed boots and attachments to boots for deformities. These splints and appliances are obtained from, and alterations made at, various places according to the type of appliance required or the work to be done. Parents contribute towards the cost of these appliances according to a fixed scale of charges per weekly income. The total cost of splints supplied to school children was £28 13s. 5d., and towards this, parents contributed £12 4s. 6d.

Hospital treatment was advised in many instances and the following is a summary of the cases treated in this way :—

LIVERPOOL CHILDREN'S HOSPITAL, HESWALL, CHESHIRE.

This institution, which is a residential hospital school, is the country hospital of the Liverpool Children's Hospital, Myrtle Street, Liverpool, from and to which institution all cases are admitted and discharged. Twelve children (seven boys and five girls) were admitted, and, including five boys and two girls who were in-patients at the beginning of the year, nine children (six boys and three girls) were discharged. One boy died, one boy was withdrawn by the parents, and the parents of one boy removed to Fleetwood and, therefore, the responsibility was transferred to that authority. Seven children (three boys and four girls) remained under treatment at the end of the year. Of the nineteen cases who received hospital treatment, thirteen were chargeable to the Education Committee and six to the Maternity and Child Welfare Committee. Children suffering from surgical tuberculosis are referred to the Tuberculosis Committee for admission into beds which that Committee has in this institution and elsewhere. The average length of stay of completed cases was 194 days.

The total amount paid to the hospital authorities in respect of the maintenance of thirteen children chargeable to the Education Committee was £310 15s. 0d., towards which parents contributed £13 7s. 6d.

LIVERPOOL CHILDREN'S HOSPITAL, MYRTLE STREET, LIVERPOOL.

Cases for which out-patient treatment only is required are directed to attend this hospital. In addition to out-patient cases, children requiring short in-patient treatment up to about fourteen days are also admitted. Nineteen children were sent, 13 for in-patient treatment and six as out-patients, and received treatment by : manipulation and plaster, two; X-ray examinations, seven; and operative treatment, ten. Twelve of these cases were chargeable to the Education Committee and seven to the Maternity and Child Welfare Committee. The average length of stay of those treated as in-patients was nine days.

The total amount paid to the Myrtle Street Hospital in respect of the treatment of the cases chargeable to the Education Committee was £36 9s. 6d.

Thanks are due to the Preston Ladies Voluntary Workers' Association who have been of great assistance both in the clinics and in the homes of the cases.

The closest possible co-operation is maintained between the various Committees responsible for cases. The cases under school age are presented by an officer of the Maternity and Child Welfare Committee, who receives instructions direct from the Orthopædic Surgeon, such as relate to massage and ultra-violet therapy.

(p) Light Therapy.

During the year under review 116 new cases were treated, as compared with 78 in 1930. Owing to an increase in the numbers waiting for treatment it was arranged (March, 1931) to hold four sessions per week instead of two. This also allowed individual cases to receive a longer period of treatment than was possible under previous arrangements. The total attendances were 2,430, and the total number of sessions 141. The average attendance per session was over 17. Twenty-one children did not complete their course of treatment. Of these 16 were discharged for non-attendance, two were referred to the Infirmary for treatment of Tuberculosis, and two reacted unfavourably and were discharged. On examination of Table XXI the results of treatment will be seen. While it is impossible to claim that ultra-violet ray is a specific cure for any condition, there is no doubt that cases of rickets, tubercular glands, psoriasis, abdominal tuberculosis, alopecia, and general debility, are improved by this form of therapy. The general health is improved and powers of resistance are increased. There is at present a waiting list of over 75 for ultra violet ray treatment.

(q) Rheumatism.

It is becoming increasingly evident that rheumatic infections are the commonest cause of any individual prolonged absence from school. During the year under review 31 cases of chorea and 32 cases of rheumatism were seen at medical inspections and in the clinics. To prevent serious complications in these cases a modified school curriculum, with sufficient rest and absence of nervous tension, is necessary. Treatment on open air school lines is not suitable for rheumatic children. Other points needing attention are a full diet including cod liver oil and malt and extra milk, and ample warm clothing. A few rheumatic cases gave a history of scarlet fever immediately preceding the rheumatic condition. It would be of distinct advantage if some arrangement could be made for prolonged residential treatment of severe rheumatic cases. About one-third of all rheumatic cases develop heart disease and many of these individuals are rendered permanently unfit for employment and thus become a charge on the community.

6.—INFECTIOUS DISEASES.

Notifiable infectious diseases as they affect school children are treated fully in the annual report of the Medical Officer of Health. In addition to the information received from medical practitioners as to legally notifiable diseases there is a large group of "minor" infectious conditions some

of which cause loss of school attendance, serious illness and, in the case of whooping cough and influenza, a mortality which makes a perceptible mark upon the vital statistics. These diseases are whooping cough, mumps, chicken pox and influenza. The system by which early information as to these diseases is obtained is by way of notification by the head teachers to the Director of Education of the disease as the cause of or the suspected cause of absence from school of the children notified. The lists so obtained are transmitted to the Medical Officer of Health and the cases visited by the health visitors. The list of children so verified and amplified by the discovery of other children attending the particular school concerned are returned to the Director. The value of this work lies in the opportunity given to the staff for direct health teaching as to the nursing treatment of the patient, the importance of medical advice in the case of complications and the best means to take for the avoidance of the spread of infection. It also enables them to put the household in immediate touch with those charitable and public agencies which exist for their benefit.

Table XXII details the infectious diseases and the schools affected.

The epidemic of measles referred to in last year's report continued during the first three months of the year, giving rise to 528 cases amongst school children. Chicken Pox mainly infects pre-school children. This continued throughout the year and infected 237 school children. There were only three cases of Diphtheria and 39 of Scarlet Fever during the year. The incidence of cases of Mumps still remains high, 244 cases were reported.

School closure was not resorted to in any instance.

Certificates under Schedule 4, Rule 23 of the Code of Education, certifying that the average attendance had fallen below 60 per cent. on account of epidemic illness were issued in respect of the following schools :—

School	Week ending	Disease
St. Augustine's Infants'	January 9th	Mumps
St. Mary's C.E. Infants'	„ 16th	„
St. Mary's C.E. Infants'	February 6th	Influenza
Eldon Street Council Infants'	„ 13th	„
St. Augustine's Infants'	„ 13th	„
St. Andrew's Infants'	„ 27th	Mumps
Ribbleton Avenue Council Infants'	November 13th	Measles
St. Matthew's Infants'	December 4th	„
St. Mary's St. Wesleyan Infants'	„ 18th	„

These compare with five certificates issued representing two schools in 1930 and 43 certificates issued to eleven schools in 1929.

7.—FOLLOWING UP.

A total of 6,244 home visits were paid by the nurses in respect of defects found during medical, dental and other inspections at schools and also for various other reasons arising during the course of the year. The number of visits paid in 1930 was 6,294.

Table XXIII gives a classification of defects for which visits were made and the extent to which repeat visits were necessary.

The defect which causes the largest amount of visiting is uncleanness and totals 3,141 an increase of 197 on the previous year. Enlarged tonsils and adenoids and defective vision cause the largest number of visits in respect of medical defects and numbered 951 and 869, respectively, as compared with 823 and 965 in 1930.

The assistance of the officer for the National Association for the Prevention of Cruelty to Children was sought in three instances.

8.—OPEN AIR SCHOOL.

The general arrangements and method of working this school have been described in previous reports and do not require repetition here.

In addition to the department which deals with the physically defective children, there is carried out, in a separate department, the education of the mentally defective. This branch of the activities of the school is dealt with and discussed in subsequent paragraphs, i.e. under heading number 13.

A well-equipped clinic is included in the premises of the school and here is carried out all the medical work connected with the children in both departments, an artificial sunlight clinic and an orthopædic clinic. The two latter clinics have already been discussed in previous pages. In addition to the above, the pupils from three nearby schools, St. Gregory's, Deepdale Council and Deepdale Modern, attend the inspection and minor ailments treatment clinics when the necessity arises.

The waiting list for admission has never been below about 50 during the year. 113 were in attendance at the beginning of the year and 144 were admitted during the year. The number discharged was 122 leaving 135 on the register at the end of the year. The various reasons for discharge are specified in the table. The period of attendance of those discharged averaged 11.2 months (girls 10.6 months, boys 11.8 months).

Bronchitis still remains the principal cause of admission to the Open Air School, and of the 144 children admitted, 36 suffered from this defect. Of the others anæmia and debility account for the bulk of admission.

It can be definitely stated that all children benefit by their stay at the Open Air School. All increase in weight particularly during their first three months after admission.

Apart from their general education, the children are instructed in simple hygiene, the result being evidenced by their personal cleanliness and good habits.

A detailed analysis of the reasons for admission and discharge is seen in the annex to Table XXIV. Particulars of cases treated and attendances at the minor ailments treatment clinic are included in Table XIII which relates to all the clinics and the attendances of the children from the three schools previously mentioned at the inspection clinic are included in Table XII. In addition, there were 164 children examined on admission, 115 special examinations, 307 re-examinations and 340 examinations of children who were receiving artificial sunlight treatment.

Most children receive a weekly bath. 3,043 baths were given to the children attending the section for physical defectives and 1,871 to those attending the section for mental defectives, a total of 4,914.

As your Committee is aware, the Open Air School buildings are of a temporary nature and are with the progress of time becoming delapidated. Modern buildings, designed for the particular purpose, are urgently needed and the whole subject is receiving your careful attention.

9.—PHYSICAL TRAINING.

In the elementary schools physical training is organised by the teachers and forms a part of each day's curriculum. Games are arranged also by the teaching staff for both sexes.

Playing fields on Penwortham Holme, at Frenchwood, and the Parks, provide ample facilities available for the children to play organised games.

In the case of secondary schools, physical training forms a very important part of the curriculum and the schools are furnished with well-equipped gymnasiums and apparatus under the direction of specially qualified masters and mistresses. Each school has also its own playing fields for properly organised games.

10.—PROVISION OF MEALS.

62,125 meals were supplied during the year at the two centres situated in Marsh Lane and Glover's Court, compared with 53,897 in 1930. The number of children attending was 356 and in 1930, 350.

11.—SCHOOL SWIMMING BATHS.

The attendances during 1931 at the four baths available—Saul Street, Moor Park, Waverley Park and Haslam Park—were 20,612, compared with 20,178 in 1930 and 19,450 in 1929. A standing arrangement is made with each school for the children to attend at a certain time each week and this they do accompanied by a teacher.

12.—CO-OPERATION.

The School Medical Service organisation demands the closest possible co-operation between the Medical Officers, the Nurses, Staff of the Director of Education, the teachers and the parents.

The assistance of the school teachers is freely given and much appreciated and although they are sometimes placed in difficulties by lack of accommodation in their schools, the inspections are carried out in the smoothest possible manner. The teachers' help is invaluable in obtaining regular daily attendance of the children under treatment. The parents also are becoming

much more interested in School Medical work due to advice received from teachers who have many opportunities of getting in touch with them.

The co-operation of the school attendance officers and other members of the staff of the Director of Education is close and cordial and a great help to the service. There is an almost daily interchange of information.

13.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

Mental Deficiency.

During the year 88 children were examined for the purpose of ascertainment of mental ability. The system used is the Stanford revision of the Binet Simon test and the Porteus Maze Test in a few cases. Performance Tests are also used.

Three children were certified to be imbeciles, 34 as feeble-minded, and the remaining 51 proved to be merely dull or backward.

The three imbeciles together with one low grade feeble-minded child were notified to the Local Authority under the Mental Deficiency Act, 33 feeble-minded children were recommended to attend the Special Day School for Mentally Defective Children, and the 51 dull and backward children directed to attend an ordinary public elementary school. In addition to these, four children were notified to the local authority as being about to leave a special school and needing further institutional care or guardianship.

The intelligence quotient, that is, the mental age as compared with the actual age, expressed as a percentage of the latter, of the second group of children ranged from 46 per cent. to 80 per cent. Some of the children in the higher percentages suffered from some physical defect, such as slight deafness or general malnutrition, which acted as a mechanical hindrance to education.

The majority of the dull or backward children, whose intelligence quotients ranged from 75 per cent. and upwards suffered from some physical defect or disease which disguised their mental ability, and these were directed to return to their own school, or were admitted to the physically defective department of Moor Park Open Air School.

The education of mentally defective (feeble-minded) children is carried out at the Special School, Moor Park. The number of children admitted during 1931 was fifteen, eighteen children left the school and 64, consisting of 37 boys and 27 girls, remained on the register at the end of the year, compared with 65 at the end of 1930. Of the children leaving, eleven were fourteen years of age, three were aged sixteen (these fourteen children were suitable for employment), two were admitted to Institutions, and two were discharged as ineducable, and recommended for admission to an occupation centre or permanent care under the Local Authority.

The power conferred on the Authority to enforce the attendance of these children until the age of sixteen years has not been used.

71 re-examinations of children attending the school were carried out during the year at the Open Air School Clinic.

In arranging an educational programme for the Mentally Defective, attention is paid to handicraft and gardening, carpentry, raffia work, basket making, sewing and clay modelling. Each child gets individual attention and its mental development rather than its actual age in years is considered.

In addition to the foregoing, there were at the end of 1931 two girls in Allerton Priory and three boys at Pontville residential schools for the mentally defective.

Blind Children.

Three children were found to have insufficient vision to enable them to be taught in an ordinary elementary school and were recommended to attend an appropriate special school.

During the year there were eleven boys and seven girls receiving tuition in the Home for the Blind, Fulwood, eight boys and three girls being trainees, three boys and one girl in the Home for the Blind, Liverpool, and one boy in the College for the Blind, Norwood, London.

Deaf and Dumb Children.

Two boys and six girls were in attendance at the Royal Cross School for the Deaf, and three boys at the Boston Spa Home for the Deaf.

Epileptic Children.

These children have already been reported upon in paragraph 5 (n).

14.—SECONDARY SCHOOLS.

Particulars of numbers inspected at the secondary schools — and the numbers and percentages of defects referred for treatment are dealt with in Table XXV. of the Appendix.

The number of pupils examined is larger than last year, the total being 1,814 as compared with 1,696 in 1930 and 1,715 in 1929.

Dental caries was the most frequent defect of which there was a total of 498 cases, or 27.45 per cent. compared with 31.07 per cent., and 24.95 per cent. in the two preceding years.

Defective vision, the next largest group of defects in frequency numbered 206 or 11.35 per cent. compared with 11.02 per cent. and 8.51 per cent. in previous years.

Enlarged tonsils and adenoids numbered 75 or 4.18 per cent. compared with 8.90 per cent. and 4.08 per cent. in previous years.

Arrangements have been made for the undertaking of the inspection of the teeth by the school dental surgeons and, in the case of necessitous children and on the recommendation of the headmaster or mistress, the undertaking of treatment.

Thanks are due to the Head Masters and Head Mistresses for their keen interest in the work and their success in arranging with the parents for the carrying out of the necessary treatment.

APPENDIX.

Tables I to IX are Statistical Tables prepared for the Board of Education.

TABLE I.

Return of Medical Inspections, 1st January to 31st December, 1931.

A.—ROUTINE MEDICAL INSPECTIONS.

	No. of Code Group Inspections		Total
	Boys	Girls	
Entrants	1030	983	2013
Intermediates	918	941	1859
Leavers	586	573	1159
No. of other Routine Inspections ...	527	520	1047
Total	3061	3017	6078

B.—OTHER INSPECTIONS.

	Boys	Girls	Total
No. of Special Inspections—			
(a) School ...	40	32	72
(b) Clinic ...	...	...	2964
No. of Re-inspections—			
(a) School ...	1049	1134	2183
(b) Clinic ...	...	...	4438
Total	1089	1166	9657

TABLE II.

Return of Defects found by Medical Inspection in the year ended 31st December, 1931.

DEFECT OR DISEASE.	ROUTINE INSPECTION			SPECIAL INSPECTIONS		
	NO. OF DEFECTS.			NO. OF DEFECTS		
	Requiring Treatment	Requiring observation but not requiring Treatment	Requiring observation but not requiring Treatment	Requiring Treatment	Requiring observation but not requiring Treatment	Requiring observation but not requiring Treatment
	2	3	5	4	5	5
1						
Malnutrition	...	...	...	43	...	...
Uncleanliness Head	3	2	...	11	...	...
" Body	12	...	...	...	...	...
Skin	1	...	...	33	...	...
	1	...	...	18	...	...
	1	...	...	28	...	...
	10	1	...	89	...	...
	6	...	...	115	...	...
Eye	21	...	...	49	...	...
	1	...	...	55	...	...
	...	...	...	2	...	...
	1	...	...	8	...	...
	413	39	6	135	6	6
	28	1	1	18	1	1
	4	...	...	55	...	...
	...	...	...	24	...	...
	20	1	...	252	...	...
Ear	1	...	...	89	...	...
Nose and Throat	300	328	137	231	137	137
	17	9	...	46	...	...
	63	6	...	113	...	...
	8	1	4	167	4	4

Enlarged Cervical Glands (non-tubercular).	16	9	109	6
Defective Speech	...	...	4	1
Teeth :—Dental Diseases	175	6	30	...
Heart and Circulation { Heart Disease :—	...	...	4	...
Organic	13	54	25	21
Functional	42	12	61	1
Anaemia	65	55	145	8
Lungs { Bronchitis	...	2	95	...
{ Other non-tubercular Diseases	...	...	7	...
Pulmonary :—	10	1	8	...
Definite	...	...	13	...
Suspected	1	...	...	...
Non-Pulmonary :—	...	...	...	...
Glands	...	...	...	...
Spine	...	...	...	...
Hip	...	...	...	...
Other Bones and Joints..	...	...	...	...
Skin	...	...	...	...
Other Forms	...	...	6	...
Nervous System { Epilepsy	3	...	12	...
{ Chorea	...	2	31	1
{ Other Conditions	2	...	10	...
Deformities { Rickets	5	...	6	...
{ Spinal Curvature	10	...	...	...
{ Other Forms	14	...	28	...
Other Defects and Diseases	19	7	1007	1

TABLE III.
Return of all Exceptional Children in the Area.

		Boys	Girls	Total
Children suffering from the following types of Multiple Defect, <i>i.e.</i> , any combination of Total Blindness, Total Deafness, Mental Defect, Epilepsy, Active Tuberculosis, Crippling, or Heart Disease	... ..	3	...	3
Blind (including partially blind).	(i) Suitable for training in a School for the totally blind.	9	3	12
	At Certified Schools for the Blind	...	...	...
	At Public Elementary Schools	...	...	...
	At other Institutions	...	...	...
	At no School or Institution	...	...	...
	At Certified Schools for the Blind or Partially Blind	6	5	11
	At Public Elementary Schools	...	...	...
	At other Institutions	...	...	...
Deaf (including deaf and dumb and partially deaf).	At no School or Institution	...	...	...
	At Certified Schools for the Deaf	5	6	11
	At Public Elementary Schools	...	...	...
	At other Institutions	...	...	...
	At no School or Institution	...	...	...
	At Certified Schools for the Deaf or Partially Deaf	...	...	...
	At Public Elementary Schools	...	...	...
	At other Institutions	...	...	...
Mentally Defective.	At no School or Institution	...	...	...
	At Certified Schools for Mentally Defective Children	47	35	82
	At Public Elementary Schools	8	18	26
	At other Institutions	3	2	5
	At no School or Institution	20	19	38
	Notified to the Local Mental Deficiency Authority during the year	5	2	7

		Boys	Girls	Total
Epileptics.	Suffering from severe epilepsy.	At Certified Schools for Epileptics ...	...	...
		At Certified Residential Open Air Schools ...	...	...
		At Certified Day Open Air Schools ...	...	...
		At Public Elementary Schools ...	...	...
	Suffering from epilepsy which is not severe.	At other Institutions ...	...	I
		At no School or Institution ...	I	...
		At Public Elementary Schools ...	7	I2
		At no School or Institution ...	...	...
	Active pulmonary tuberculosis (including pleura and intrathoracic glands).	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board ...	5	8
		At Certified Residential Open Air Schools ...	...	...
		At Certified Day Open Air Schools ...	...	...
		At Public Elementary Schools ...	...	...
	Quiescent or arrested pulmonary tuberculosis (including pleura and intrathoracic glands).	At other Institutions ...	...	...
		At no School or Institution ...	...	...
		At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board ...	...	...
		At Certified Residential Open Air Schools ...	...	...
	Tuberculosis of the peripheral glands.	At Certified Day Open Air Schools ...	I	I
		At Public Elementary Schools ...	...	...
		At other Institutions ...	...	...
		At no School or Institution ...	...	...
Physically Defective.	Tuberculosis of the peripheral glands.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board ...	...	...
		At Certified Residential Open Air Schools ...	...	...
		At Certified Day Open Air Schools ...	2	3
		At Public Elementary Schools ...	...	...
	Abdominal tuberculosis.	At other Institutions ...	...	...
		At no School or Institution ...	...	...
		At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board ...	I	I
		At Certified Residential Open Air Schools ...	...	...
		At Certified Day Open Air Schools ...	I	3
		At Public Elementary Schools ...	...	...
		At other Institutions ...	...	...
		At no School or Institution ...	...	...

TABLE III.—Continued.

		Boys	Girls	Total
Tuberculosis of bones and joints (not including deformities due to old tuberculosis).	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	1	1	2
	At Public Elementary Schools	4	7	11
	At other Institutions	...	...	...
	At no School or Institution	1	3	4
Tuberculosis of other organs (skin, etc.).	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	...	...	...
	At Public Elementary Schools	...	...	...
	At other Institutions	...	...	...
	At no School or Institution	...	...	...
Physically Defective (continued).	Delicate children, <i>i.e.</i> , all children (except those included in other groups) whose general health renders it desirable that they should be selected for admission to an Open Air School.	...	...	...
	At Certified Residential Cripple Schools	...	...	...
	At Certified Day Cripple Schools	...	...	...
	At Certified Residential Open Air Schools	...	...	...
	At Certified Day Open Air Schools	50	68	118
	At Public Elementary Schools	33	34	67
	At other Institutions	...	...	...
	At no School or Institution	...	...	...
Crippled Children (other than those with active tuberculous disease) who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life.	At Certified Hospital Schools	1	5	6
	At Certified Residential Cripple Schools	...	...	...
	At Certified Day Cripple Schools	...	...	...
	At Certified Residential Open Air Schools	...	...	...
	At Certified Day Open Air Schools	5	2	7
	At Public Elementary Schools	54	56	110
	At other Institutions	...	...	...
	At no School or Institution	6	11	17
Children with heart disease, <i>i.e.</i> , children whose defect is so severe as to necessitate the provision of educational facilities other than those of the public elementary school.	At Certified Hospital Schools	...	...	...
	At Certified Residential Cripple Schools	...	...	...
	At Certified Day Cripple Schools	...	...	...
	At Certified Residential Open Air Schools	...	...	...
	At Certified Day Open Air Schools	9	7	16
	At Public Elementary Schools	...	...	...
	At other Institutions	...	...	...
	At no School or Institution	...	...	...

TABLE IV.

Number of individual children found at routine medical inspection to require treatment (excluding Uncleanliness and Dental Diseases).

Group	Number of Children		Percentage of Children found to require Treatment
	Inspected	Found to require Treatment	
(1)	(2)	(3)	(4)
Code Groups :			
Entrants	2013	278	13·81
Intermediates	1859	439	23·61
Leavers	1159	307	26·48
Total (Code Groups).....	5031	1024	20·35
Other Routine Inspections .. (School leavers).	1047	...	...

TABLE V.

Return of defects treated during the year ended 31st December, 1931.

GROUP I.—Minor Ailments (excluding Uncleanliness, for which see Group V).

Disease or Defect.	Number of defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
(1)	(2)	(3)	(4)
Skin—			
Ringworm, Body	12	—	12
" Scalp	73	2	75
Scabies	10	—	10
Impetigo	425	2	427
Other Skin Disease	67	4	71
Minor Eye Defects—			
External and other, but excluding cases falling in Group II.	336	11	347
Minor Ear Defects	352	12	364
Miscellaneous (<i>e.g.</i> , Minor Injuries, Bruises, Sores, Chilblains, etc.)	3295	18	3313
TOTAL	4570	49	4619

TABLE VI.

GROUP II.—Defective Vision and Squint (Excluding Minor Eye Defects Treated as Minor Ailments—Group I.).

Defect or Disease	Number of Defects dealt with			
	Under the Authority's Scheme	Submitted to Refraction by Private Practitioner or at Hospital apart from the Authority's Scheme	Otherwise	Total
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including Squint) ...	959	11	8	978
Other Defect or Disease of the Eye (excluding those recorded in Group I.)	...	...	...	...
Total	959	11	8	978

Total number of children for whom spectacles were prescribed :—

(a) Under the Authority's Scheme	...	...	...	680
(b) Otherwise	...	...	...	18

Total number of children who obtained or received spectacles :—

(a) Under the Authority's Scheme	...	...	...	526
(b) Otherwise	...	...	...	18
(c) Supplied free by the Education Committee	...	...	...	84

TABLE VII.

Group III.—Treatment of Defects of Nose and Throat.

NUMBER OF DEFECTS.				
Received Operative Treatment.			Received other forms of Treatment	Total Number Treated
Under the Authority's Scheme, in Clinic or Hospital	By Private Practitioner or at Hospital, apart from the Authority's Scheme	Total		
(1)	(2)	(3)	(4)	(5)
420	3	423	97	520

TABLE VIII.

Dental Defects.

(I) Number of Children who were :—

(a) Inspected by the Dentists :

				Aged :					
Routine Age Groups	{	4	...	—	{				
		5	...	36					
		6	...	705					
		7	...	796					
		8	...	776					
		9	...	866					
		10	...	907					
		11	...	759					
		12	...	553					
		13	...	62					
		14	...	—					
		15	...	—					
		16	...	—					
					Total	...	...	5460	
Specials	...	...	...	...	...	...	...	3568	
Grand Total				...	...	...	...	9028	

TABLE VIII—continued.

			Routine	Special	Total
(b) Found to require treatment	...		3912	3568	7480
(c) Actually treated	...	...	2502	3568	6070
(d) Re-treated during the year as the result of periodical examination...			1081	...	1081
(2) Half-days devoted to	{ Inspection	...	42	Total ...	1334
	{ Treatment	...	1292		
(3) Attendances made by children for treatment	...	...		...	10335
(4) Fillings	...	{ Permanent Teeth	9151	Total ...	9151
	...	{ Temporary Teeth	—		
(5) Extractions	...	{ Permanent Teeth	1169	Total ...	5170
	...	{ Temporary Teeth	4001		
(6) Administrations of general anæsthetics for extractions	...	...		...	839
(7) Other operations	...	{ Permanent Teeth	1755	Total ...	1755
	...	{ Temporary Teeth	—		

TABLE IX.

GROUP V.—Uncleanliness and Verminous Conditions.

(1) Average number of visits per school made during the year by the School Nurses	...	...	...	...	...	...	3
(2) Total number of examinations of children in the schools by School Nurses	...	...	...	...	...	...	25780
(3) Number of individual children found unclean—							
	Few Nits		...	...			3309
	Moderate Nits		...	...			3123
	Severe Nits		...	...			280
	Vermin		...	...			3
	Total		...	...			6715
(4) Number of children cleansed under arrangements made by the Local Education Authority	...	...	...	...	...		7
(5) Number of cases in which legal proceedings were taken :—							
(a) Under the Education Act, 1921	...	...	...	...			—
(b) Under School Attendance Bye-laws	...	...	...	...			—

TABLE IXa.

Uncleanliness and Verminous Condition.

Age	Number exam- ined	Clean		Slight Infection		Moderate Infection		Major Infection	
		No.	%	No.	%	No.	%	No.	%
Infants under 7 years	6914	5013	72.5	826	11.9	953	13.8	122	1.8
7	2904	2030	69.9	392	13.5	434	15.0	48	1.6
8	3043	2180	71.6	447	14.7	392	12.9	24	0.8
9	3095	2256	72.9	432	13.9	371	12.0	36	1.2
10	3346	2439	72.7	475	14.2	408	12.2	24	0.7
11	2697	2095	77.7	319	11.9	273	10.1	10	0.3
12 and over	3781	3052	80.7	418	11.1	292	7.7	19	0.5
Total	25780	19065	74.0	3309	12.8	3123	12.1	383	1.1
All ages									
1931	25780	19065	74.0	3309	12.8	3123	12.1	283	1.1
1930	25179	18926	75.1	3142	12.5	2879	11.4	232	0.9
1929	24780	18183	73.4	3377	13.6	2917	11.8	303	1.2
1928	22331	16634	74.0	2999	13.4	2367	10.6	331	1.5
1927	21837	15083	69.1	3652	16.7	2667	12.2	435	1.9
1926	18565	12343	66.4	3835	20.6	1963	10.7	424	2.3

TABLE X.

School Accommodation and Average Attendance.

				Number of Schools	Recognised Accommodation	Average attendance for year ended 31st March, 1931
Church of England	...			19	13478	6478
Roman Catholic	...			11	9982	6032
Nonconformist	...			6	2587	1739
Council	...			7	3394	2283
Total	...			43	29441	16532

TABLE XI.

Total number of Children examined (all forms).

Year of Examination...	1931	1930	1929	1928	1927
Entrants	2013	2034	2274	2485	2432
Intermediate	1859	2162	2236	1584	1405
Leavers	1159	1252	1532	1560	1792
School Term Leavers ...	1047	439	1062	...	...
Special Cases (a) Clinic ...	2964	3015	2775	2742	2683
(b) School ...	72	132	70	103	160
Re-inspections (a) Clinic ...	4438	4998	4145	4094	3723
(b) School ...	2183	2138	2123	1860	1689
Totals	15736	16170	16217	14428	13884

TABLE XII.

Medical Inspection Clinics.

Defect.	On Books, 1st Jan. 1931.	New Cases.	Dis- charged.	Left on the Books 31st Dec., 1931.
Malnutrition	12	74	60	26
Uncleanliness—Head	1	11	8	4
„ Body	...	...	...	...
Skin Disease	34	271	247	58
Eye	16	246	224	38
Ear	51	313	252	112
Nose and Throat	33	379	370	42
Enlarged Glands	22	147	156	13
Defective Speech	3	2	4	1
Teeth	4	22	19	7
Heart and Circulation	11	71	62	20
Lungs	38	235	206	67
Tuberculosis—Pulmonary	8	9	14	3
„ Non-Pulmonary	1	22	19	4
Nervous System	12	56	45	23
Deformities	10	35	41	4
Other Defects	80	961	936	105
Total	336	2854	2663	527
Clinics : Miller Arcade	205	1172	1052	325
Cuttle Street	36	813	768	81
Barlow Street... ..	65	681	674	72
Open-Air School	30	181	162	49
Nursery School	...	7	7	...

Total attendances for the last five years :—

	Miller Arcade Clinic.	Cuttle Street	Barlow Street Clinic.	Open Air School	Nursery School	Total.
1931...	2673	1903	2156	504	14	7250
1930...	4788	...	2779	279	...	7846
1929...	4045	...	2685	190	...	6920
1928...	4376	...	2417	43	...	6836
1927...	4123	...	2138	145	...	6406

TABLE XIII.

Minor Ailments Treatment Clinics.

Defect.	On Books, 1st Jan. 1931.	New Cases.	Dis- charged.	Left on the Books 31st Dec., 1931.
Skin :				
Ringworm, Scalp and Body	13	72	81	4
Scabies	...	10	10	...
Impetigo	20	405	387	38
Other Skin Diseases ...	5	62	59	8
Minor Eye Defects :				
External and other, but ex- cluding cases falling in Table IV., Group I.	11	325	302	34
Minor Ear Defects	73	279	256	96
Miscellaneous (<i>e.g.</i> , Minor Injuries, Bruises, Sores, Chilblains, etc.)	130	3165	3141	154
Total	252	4318	4236	334
Clinics : Miller Arcade	149	1711	1671	189
Cuttle Street	44	1219	1179	84
Barlow Street	43	1153	1157	39
Open-Air School... ..	16	216	210	22
Nursery School	...	19	19	...

Total attendances for the last five years :—

	Miller Arcade	Cuttle Street	Barlow Street	Open Air School	Nursery School	Total
1931	18395	13455	9769	5793	127	47539
1930	28280	...	11813	4692	...	44785
1929	30211	...	13204	4876	...	48291
1928	28511	...	11976	4128	...	44615
1927	30207	...	10155	4801	...	45163

TABLE XIV.
Tonsils and Adenoids.
Number of defects found at Routine Inspections.

	No. examined	No. referred for treatment	%	No. referred for observation	%
Entrants—Boys ...	1030	66	6.47	63	6.11
Girls ...	983	60	6.10	68	6.91
Intermediate—Boys	918	55	5.99	74	8.06
Girls	941	87	9.24	96	10.20
Leavers—Boys ...	586	54	9.21	19	3.24
Girls ...	573	68	11.86	23	4.01
Totals	5031	390	7.75	343	6.81

TABLE XV.
Defective Vision and/or Squint.
Number of Defects found.

				Routine Medical Inspection.					
				No. examined		No. referred for treatment		Percentage referred	
				1930	1931	1930	1931	1930	1931
Intermediate Group—Boys	(aged 8—9)	Boys	...	1072	918	120	129	11.2	14.0
		Girls	...	1090	941	138	118	12.2	12.5
Leavers Group—Boys	(aged 12)	Boys	...	661	586	67	92	10.1	15.8
		Girls	...	591	573	64	84	10.8	14.6

Work of the Refraction Clinic.

	1928	1929	1930	1931
No. of Sessions	123	124	125	128
Total No. of Refractions carried out ...	828	1018	962	959
Total No. of Prescriptions given	676	837	751	680
Total Attendances	1863	2302	2461	2708
Average Attendance per Session	15.2	18.5	19.6	21.1

TABLE XVI.

Summary of the Work of the Dental Surgeons.
For the Period January 1st, to December 31st, 1931.
ROUTINE GROUPS.

SCHOOLS VISITED	Number of Children Examined at School	No Treatment required	Number requiring Treatment	Number accepted Treatment	Number refused Treatment	Own Dentist	PARTICULARS OF ATTENDANCES AND WORK AT DENTAL CLINIC.							No. of Stoppings	No. of Dressings	No. of Scalings
							Number attended Clinic	No. of Actual Attendances at Clinic	Number Re-treated	No. of Extractions.		No. of				
										T.	P.					
St. Joseph's	...	...	...	...	...	...	81	229	40	32	1	337	82	337	2	
St. Luke's	...	...	...	...	...	...	103	189	27	13	...	276	87	276	...	
Frenchwood	216	46	170	121	49	...	119	240	42	5	...	471	18	471	1	
St. Ignatius'	782	200	582	432	150	...	373	883	166	13	2	1209	41	1209	4	
St. Mary's Wesleyan	161	71	90	53	30	7	54	141	33	18	...	213	56	213	2	
St. Thomas'	387	73	314	181	133	...	183	303	86	8	...	616	14	616	1	
Ribbleton Avenue	258	100	158	132	14	12	113	359	59	28	...	529	161	529	2	
St. Saviour's	219	75	144	106	37	1	92	238	43	18	...	384	73	384	...	
Christ Church	313	69	244	145	97	2	160	324	76	12	1	523	17	523	1	
Deepdale Modern	115	14	101	67	33	1	80	240	42	...	...	248	16	248	6	
St. Augustine's	603	239	364	255	102	7	254	544	109	80	6	877	195	877	3	
Grimshaw St. Council	53	7	46	27	17	2	23	83	19	5	1	115	40	115	...	
St. James'	117	22	95	68	27	...	65	180	32	...	...	190	12	190	1	
Orchard ...	100	23	77	40	33	4	39	91	22	2	...	176	2	176	1	
All Saints'	250	50	200	131	62	7	117	319	61	10	1	448	20	448	1	
Emmanuel	400	111	289	127	162	...	122	243	46	5	...	259	20	259	1	
Blessed Sacrament	216	104	112	95	6	11	88	209	19	21	2	268	99	268	...	
Parish ...	166	81	85	58	27	...	60	126	4	7	...	199	9	199	1	
Moor Park Wesleyan	392	81	311	175	126	10	161	287	69	2	...	412	17	412	1	
St. Paul's	268	89	179	113	59	7	101	225	49	24	1	309	106	309	1	
St. Wilfrid's	93	14	79	47	32	...	53	103	17	5	...	156	3	156	...	
Holy Trinity	76	8	68	40	28	...	40	78	15	...	...	153	2	153	...	
St. Peter's	204	35	169	92	76	1	21	34	5	...	...	51	4	51	...	
St. Jude's	71	36	35	20	14	1	...	...	...	...	...	...	...	...	...	
	5460	1548	3912	2525	1314	73	2502	5668	1081	308	15	8419	1094	8419	29	

TABLE XVII.

Children Inspected in the Routine Age Groups during the last five years.

YEAR	AGES													Totals
	4	5	6	7	8	9	10	11	12	13	14	15	16	
1931	...	36	705	796	776	866	907	759	553	62	...	...	...	5460
1930	...	...	668	665	664	689	674	403	49	20	1	...	...	3833
1929	...	...	1240	1545	1582	1452	895	23	13	15	1	...	...	6766
1928	...	...	2044	2211	2051	1271	257	23	19	16	4	...	...	7896
1927	...	...	1752	1968	1079	280	36	26	37	47	8	...	...	5233

TABLE XVIII.

Percentage of children requiring treatment in each age group.

YEAR	Aged 6	Aged 7	Aged 8	Aged 9	Aged 10	Aged 11	Aged 12
1931 ...	41.3	63.7	75.4	80.1	80.0	77.7	82.8
1930 ...	23.3	46.9	55.1	55.1	54.4	57.3	...
1929 ...	25.5	47.0	52.5	47.9	49.9	...	...
1928 ...	24.1	33.5	46.6	46.8	...	...	...
1927 ...	32.6	58.6	65.1	...	...	...	...

TABLE XIX.

Casuals attending Dental Clinic.

AGES					Number attended Clinic	No. of Actual Attend- ances at Clinic	No. of Extrac- tions		No. of Gas Adminis- trations	No. of Stoppings	No. of Dressings	No. of Scalings
							T.	P.				
Aged	3	...	...	...	I	I	2	...	...	...	...	...
„	4	...	...	...	120	123	146	...	I	4	25	...
„	5	...	...	...	338	360	417	2	18	7	73	...
„	6	...	...	...	380	415	524	14	29	34	42	...
„	7	...	...	...	493	562	673	38	40	40	46	...
„	8	...	...	...	579	677	716	96	77	86	68	...
„	9	...	...	...	421	594	488	111	90	173	56	...
„	10	...	...	...	440	603	383	180	132	119	80	...
„	11	...	...	...	327	505	219	255	163	75	90	...
„	12	...	...	...	184	309	70	184	116	37	60	...
„	13	...	...	...	225	397	47	223	143	81	74	I
„	14	...	...	...	60	120	8	50	29	76	17	...
„	15	...	...	...	...	I	...	I	I	...	...	...
Total Casuals					3568	4667	3693	1154	839	732	631	I
Corresponding numbers in :												
	1930	...	...	...	3124	3798	4310		699	344	881	10
	1929	...	...	...	2318	2870	3294		620	163	626	6
	1928	...	...	...	1931	2428	2680		591	302	505	2
	1927	...	...	...	2059	2316	3118		631	1921	256	6
	1926	...	...	...	1593	1859	1878		434	1141	81	5

TABLE XX.

Summary of the Work carried out during the last ten years.

YEAR		PARTICULARS OF ATTENDANCES AND WORK AT DENTAL CLINIC.													
		Number of Children Examined	No Treat- ment required	Number requiring Treat- ment	Number accepted Treat- ment	Number refused Treat- ment	Own Dentist	Number attended Clinic	No. of Actual Attend- ances at Clinic	No. of Extrac- tions	No. of Gas Adminis- trations.	No. of Stoppings	No. of Dressings	No. of Sealings	
1931	Routine Groups	...	1548	3912	2525	1314	73	2502	5668	323	...	8419	1094	29	
	Casuals	...	...	3568	3568	...	...	3568	4667	4847	839	732	631	1	
	Total	...	1548	7480	6093	1314	73	6070	10335	5170	839	9151	1725	30	
1930	...	...	2023	4954	4547	316	114	4623	7460	4436	699	6352	2338	37	
1929	...	...	3711	5373	4665	458	290	4462	7690	3403	620	8023	2091	24	
1928	...	...	4636	5191	4462	375	396	4095	6646	2830	591	7288	1567	13	
1927	...	...	2537	4755	4018	408	329	3822	7015	4487	631	10348	1644	8	
1926	...	...	2230	3587	3034	261	292	2834	6280	1977	434	7735	2777	9	
1925	...	...	715	2066	1779	53	234	1718	4078	1066	55	4939	1537	44	
1924	...	...	637	1897	1649	87	161	1578	3554	1021	...	3898	1110	35	
1923	...	...	627	1884	1669	54	161	1551	3504	950	...	3738	1374	59	
1922	...	...	719	1820	1578	86	156	1539	3595	926	...	3786	1570	35	

TABLE XXI.

Artificial Sunlight Clinic.

DEFECT.	Received Treatment			Condition on Discharge			Weight on Discharge			Dis- charged to Hospital, etc.	Failed to complete course
	Girls	Boys	Total	Cured	Improved	Stationary	Gained	Stationary	Loss		
En. Glands, Neck ...	15	19	34	1	23	10	25	6	3	...	7
T.B. Gland ...	2	2	4	...	4	...	3	1	...	...	...
Rickets ...	1	2	3	...	3	...	3	...	...	...	...
Psoriasis ...	...	4	4	1	2	1	4	...	...	...	...
Anæmia ...	10	7	17	...	16	1	16	1	...	...	2
Debility ...	9	8	17	...	14	3	14	1	2	...	3
Rheumatism ...	2	1	3	...	3	...	3	...	...	...	...
Bronchitis ...	5	7	12	...	8	4	8	4	...	...	3
Asthma ...	...	1	1	...	1	...	...	1	...	...	...
T.B. Abscess, Neck	...	1	1	...	1	...	1	...	...	...	...
Alopecia ...	4	7	11	...	6	...	5	6	...	...	3
Eczema ...	1	1	2	...	1	1	1	1	...	...	1
Glands in Groin ...	...	1	1	...	1	...	...	1	...	...	...
Nocturnal Enuresis	1	...	1	...	1	...	1	...	...	...	...
General Urticaria ...	1	...	1	...	1	...	1	...	...	...	...
Old Empyema ...	...	1	1	...	...	1	1	...	...	1	...
? T.B. Abdomen	...	2	2	...	2	...	2	...	...	...	...
? Abdominal ...	1	...	1	...	1	...	1	...	...	1	...
Totals ...	52	64	116	2	88	26	89	22	5	2*	19

* Referred to Preston Royal Infirmary.

TABLE XXII.
Cases of Infectious Disease reported by Head Teachers.

SCHOOL.	Scarlet Fever	Measles	Whoop- ing Cough.	Diph- theria.	Chicken Pox.	Mumps.	Ringw'rm Skin Diseases, &c.	Influ- enza.
All Saints'	...	31	10	...	2	1	1	...
Ashton Wesleyan	...	4	1	...	...	5	...	...
Blessed Sacrament	3	19	3	...	21	25	3	4
Christ Church	...	1	...	...	1	1	...	...
Deepdale Council	2	71	17	...	25	7	1	...
Eldon Street Council	...	...	...	...	13	...	1	18
Emmanuel	...	1	14	...	5	7	1	2
English Martyrs' Elementary	...	...	15	...	7	...	4	...
Frenchwood Junior Council.....	...	1	2	...	10	...	2	6
Hincksman Memorial	1	5	5	1	...	3	1	1
Holy Trinity	...	15	6	...	...	...	...	...
Moor Park Wesleyan	...	1	...	...	2	...	...	...
Open Air School	...	3	...	...	1	12	1	6
Orchard U.M.F.C.	1	...	...	...	1	2	...	...
Parish Church	...	...	...	...	...	10	...	...
Ribbleton Avenue Council	...	66	25	...	36	2	6	3
Ribbleton Avenue Wesleyan	2	1	1	...	...	2	...	...
Sacred Heart	1	5	...	...	...	...	...	...
St. Andrew's	3	1	15	...	...	28	4	4
St. Augustine's	1	48	18	...	13	18	...	5
St. Cuthbert's	...	...	2	...	...	3	...	1
St. Gregory's	...	6	...	...	2	4	...	1
St. Ignatius.....	...	53	2	...	...	...	1	...
St. James'	1	...	...	...	...	1	...	...
St. Joseph's	1	18	...	...	...	...	...	...
St. Jude's	3	3	10	...	3	3	4	...
St. Luke's	1	2	12	...	...	9	...	...
St. Mark's	...	1	18	...	11	2	...	1
St. Mary's C. of E.	2	6	3	...	4	5	...	...
St. Mary's R.C.	1	8	1	...	...	...	1	...
St. Mary's Street Wesleyan	1	23	6	...	1	11	2	...
St. Matthew's	1	58	3	...	30	3	2	2
St. Matthew's Branch	3	2	7	...	14	...	...	...
St. Michael's	1	...	9	...	...	8	...	...
St. Paul's	1	21	...	...	...	4	1	...
St. Peter's	1	17	7	...	3	2	2	...
St. Saviour's	2	...	7	...	2	29	4	...
St. Stephen's	3	16	1	...	26	27	1	19
St. Thomas's	...	1	...	...	1	...	1	...
St. Wilfrid's	...	1	3	...	...	...	...	...
Talbot.....	1	17	20	2	...	1	...	...
Roebuck Street Council	1	1	22	...	2	8	8	...
	38	527	265	3	236	243	52	73
SECONDARY SCHOOLS.								
Park Secondary School	1	1	1	...	1	1	...	...

TABLE XXIII.

Home Visiting by Nurses. Visits and Re-visits.

Visit	Tonsils & Adenoids	Vision & Squint	Bronchitis	Cardiac Defects	Eye Diseases	Skin Diseases	Enlarged Glands	Ear Diseases	Dental Defects	Uncleanliness	Miscellaneous	Total
Ist	482	374	35	22	28	34	23	31	873	3088	156	5146
2nd	178	165	2	3	...	...	2	1	52	17	2	422
3rd	104	97	...	...	...	1	...	...	5	1	5	213
4th	66	82	...	1	...	...	...	...	2	4	1	156
5th	24	46	...	...	...	...	2	...	1	10	1	84
6th	44	28	...	...	...	...	...	...	...	11	...	83
7th	20	25	...	...	...	...	...	...	...	...	...	45
8th	10	26	...	...	...	...	...	...	...	...	...	36
9th	4	11	...	...	...	...	...	...	...	10	...	25
10th	6	6	...	...	...	...	...	...	...	...	...	12
11th	4	4	...	...	...	...	...	...	...	...	...	8
12th	3	3	...	...	...	...	...	...	...	...	...	6
13th	3	2	...	...	...	...	...	...	...	...	...	5
14th	3	...	...	...	...	...	...	...	...	...	...	3
Total ...	951	869	37	26	28	35	27	32	933	3141	165	6244

TABLE XXIV.

Open Air School, 1931.

	Boys	Girls	Total
No. on books, Jan. 1st, 1931	59	54	113
No. admitted during year	64	80	144
No. discharged during year	61	61	122
No. on books, 31st Dec., 1931	62	73	135
Average No. on roll	72	75	147
Average attendance	60.0	61.8	121.9
Average period of attendance of those discharged in 1931	11.8 mths	10.6 mths	11.2 mths.

Analysis of Reasons for Admissions.

Disease	Boys	Girls	Total
Asthma	1	11	2
Asthma and Bronchitis	5	...	5
Bronchitis	17	14	31
Anæmia	11	13	24
Anæmia and Debility	...	9	9
Cardiac	4	5	9
Chorea	1	8	9
Old Chorea	1	2	3
Debility... ..	10	6	16
En. Glands	...	1	1
Erbs Paralysis	1	...	1
Epilepsy	...	1	1
Infantile Paralysis	2	...	2
Pre-T.B.	1	3	4
T.B. Glands, Neck	4	3	7
T.B. Abdomen	2	1	3
Old T.B.	2	1	3
T.B. Spine	1	1	2
T.B. Hip	1	...	1
Con. Dis. Hip	...	2	2
Gastritis... ..	...	2	2
Chronic Laryngitis	...	1	1
Rhuematism	...	4	4
Abdominal Pains	...	1	1
Tacycardia	...	1	1
Totals	64	80	144

Analysis of Reasons for Discharge.

Reasons for Discharge.	Boys	Girls	Total
Over school age (14)	5	7	12
Fit to attend former school	42	41	83
Unfit to attend any school	10	8	18
Unsuitable	1	...	1
Removed by parents	2	2	4
Left district	...	3	3
Died	1	...	1
All reasons	61	61	122

TABLE XXV.

MEDICAL INSPECTION AT SECONDARY SCHOOLS.

Number of children examined.

Ages				7	8	9	10	11	12	13	14	15	16	17	18	19	Total
Schools																	
GIRLS :																	
Park School							21	88	74	110	106	107	48	24	5	...	583
Winckley Square Convent						1	18	61	53	63	42	48	40	17	4	...	347
Lark Hill Convent						1	16	21	25	30	19	28	16	7	5	...	168
Boys :																	
Grammar School					7	10	19	42	40	62	53	72	36	18	14	...	373
Catholic College					...	2	16	73	51	70	59	37	19	13	3	...	343
Totals					7	14	90	285	243	335	279	292	159	79	31		1814

RETURN OF DEFECTS.

Ages ...	7	8	9	10	11	12	13	14	15	16	17	18	Total Defects
Malnutrition ...	...	...	...	1	2	2	2	3	1	...	...	...	11
Skin Diseases ...	...	...	...	2	...	1	3	2	2	...	1	...	11
Eye Diseases ...	...	2	2	9	31	27	41	29	38	17	7	3	206
Ear Diseases ...	...	...	...	...	2	2	...	...	2	...	...	...	6
Nose and Throat Diseases ...	...	...	1	12	15	12	14	13	6	2	...	1	76
Enl. Cervical Glands ...	...	...	...	1	...	1	1	...	...	...	...	...	3
Defective Speech ...	...	...	...	...	...	...	...	1	...	...	...	...	1
Dental Defects ...	...	2	3	37	119	64	68	66	78	43	16	2	498
Heart and Circulation ...	...	...	...	1	7	4	10	6	3	2	1	1	35
Lung Diseases ...	...	...	...	2	3	3	3	2	...	...	...	...	13
Pulmonary Tuberculosis ...	...	...	...	...	...	1	...	...	...	...	...	...	1
Non-Pulmonary Tuberculosis ...	...	...	...	...	...	...	...	1	...	...	...	...	1
Nervous Diseases ...	...	...	...	...	...	...	2	...	...	...	...	...	2
Deformities ...	...	...	...	...	1	2	4	2	1	...	...	...	10
Other Defects ...	...	...	...	...	6	5	3	1	1	...	...	...	16
Total Defects ...	...	4	6	64	186	124	151	126	132	64	25	7	889

DEFECTS AS PERCENTAGES OF NUMBERS EXAMINED.

Defect	Park School	Winckley Square Convent School	Lark Hill Convent School	Grammar School	Catholic College	Totals
Malnutrition ...	0.68	...	...	...	2.04	0.60
Skin Diseases ...	1.37	...	...	...	0.58	0.55
Eye Diseases ...	8.57	5.18	2.38	13.94	23.90	11.35
Ear Diseases ...	0.68	...	...	...	0.58	0.33
Nose and Throat ...	4.28	2.59	1.19	2.68	9.03	4.18
Cervical Glands ...	0.34	...	...	...	0.29	0.16
Defective Speech ...	...	...	...	...	0.29	0.05
Teeth ...	35.50	34.58	23.21	11.79	25.65	27.45
Heart & Circulation.	0.51	2.30	1.78	0.80	5.53	1.92
Lungs ...	...	...	...	...	3.79	0.71
Tuberculosis ...	...	...	...	...	0.58	0.10
Nervous System ...	...	...	...	...	0.58	0.10
Deformities ...	0.68	...	...	...	1.74	0.55
Other Defects ...	1.37	...	...	...	1.74	0.88
Total defects ...	54.03	44.09	28.57	29.75	76.38	49.0